

1

TIMN314 - COMMUNICATION LOG - [ Passport Asset Suite 6 - Production ]

File Edit Navigate Options View Help

Insert Delete Repeat communication.



Contract: 00084081  
 Request: 00190714  
 From Date: [ ]  
 Type: [ ]

Contract Status: [CLOSED] [02/25/2014]  
 Request Status: [COMPLETE] [02/25/2014]  
 Contract Image: [ ]  
 Request Image: [ ]

Log Details

| Date       | Type     | From          | To            | OLE | Notes   | Subject  |
|------------|----------|---------------|---------------|-----|---------|--|
| 11/25/2013 | 014NOTES | HOLLY         | TANIA         | D   | 1.21    | CLOSE AT TERM  |
| 09/19/2011 | WRITTEN  | CONSULTANT    | TANIA         | D   | NONE    | RCVD ORIG SIGNED PSC   |
| 09/09/2011 | INSURE   | JAN BARNES    | TANIA         | D   | 1.20    | RISK APPROVAL OF ALL INSURANCE                                     |
| 09/09/2011 | INSURE   | JAN BARNES    | TANIA         | D   | 1.20    | ***EMAIL REGARDING PROFESSIONAL LIABILITY***                       |
| 09/09/2011 | NTP      | TANIA         | CONSULTANT    | D   | 1.19    | RCVD EMAILED SIGNED PSC-ISSUED NTP EFF 9/12/11-SEE TERMS PANEL     |
| 09/09/2011 | INSURE   | TANIA         | CONSULTANT    | D   | 1.18    | EMAILED INSURANCE TO RISK FOR APPROVAL                             |
| 09/09/2011 | WRITTEN  | TANIA         | FILE          | D   | 1.17    | INSURANCE DOCS   |
| 09/08/2011 | WRITTEN  | TANIA         | CONSULTANT    | D   | NONE    | MAILED PSC FOR SIGNATURE   |
| 09/08/2011 | WRITTEN  | TANIA         | CONSULTANT    | D   | 1.16    | EMAILED PDF OF CONTRACT  |
| 08/26/2011 | COMDATE  | TANIA         | FILE          | D   | NONE    | *****COMMISSION DATE: SEPTEMBER 6, 2011*****                       |
| 08/25/2011 | INSURE   | JAN BARNES    | TANIA         | D   | 1.15    | INITIALED BP   |
| 08/25/2011 | INSURE   | JIM HERRLING  | TANIA         | D   | 1.14    | *****PROFESSIONAL LIABILITY WAIVED BY RISK*****                    |
| 08/25/2011 | WRITTEN  | TANIA         | CONSULTANT    | D   | 1.13    | EMAILED LEGAL RISK APPROVED BP TO CONSULTANT FOR APPROV OF ONE EXC |
| 08/25/2011 | WRITTEN  | TANIA         | FILE          | D   | 1.12    | *****MODIFIED BOILERPLATE*****                                     |
| 08/25/2011 | WRITTEN  | DANA TOULSON  | TANIA         | D   | 1.11    | *****AGM APPROVAL OF COMMISSION WRITE-UP*****                      |
| 08/19/2011 | WRITTEN  | CRAIG         | TANIA         | D   | 1.10    | RCVD MODIFIED FINAL SOW FROM PL                                    |
| 08/19/2011 | WRITTEN  | TANIA         | FILE          | D   | 1.9     | *****SCOPE OF WORK*****  |
| 08/19/2011 | INSURE   | TANIA         | JAN           | D   | 1.8     | JAN NEEDS TO SPEAK W/ANNE RE: LEGAL PERSPECTIVE ON DELETING PROF   |
| 08/19/2011 | LEGAL    | AINE SPANGLER | TANIA         | D   | 1.7     | RCVD LEGAL INPUT ON BOILERPLATE MODIFICATIONS                      |
| 08/17/2011 | INSURE   | TANIA         | JAN BARNES    | D   | 1.6/1.5 | EMAILED PSC FOR MODIFICATIONS REQUESTED BY CONSULTANT              |
| 08/17/2011 | LEGAL    | TANIA         | AINE SPANGLER | D   | 1.5     | EMAILED PSC FOR MODIFICATION REQUESTED BY CONSULTANT               |
| 08/17/2011 | PHONE    | TANIA         | CONSULTANT    | D   | NONE    | LEFT MSG RE: # OF EMPLOYEES  |
| 08/17/2011 | WRITTEN  | TANIA         | FILE          | D   | 1.4     | *****NOT LISTED ON EXCLUDED PARTIES LIST*****                      |
| 08/17/2011 | WRITTEN  | CRAIG COLLAR  | TANIA         | D   | 1.3     | CEI LANGAGUE   |
| 08/15/2011 | WRITTEN  | DANA TOULSON  | TANIA         | D   | 1.2     | ***COMPETITIVE WAIVER***   |
| 08/15/2011 | WRITTEN  | TANIA         | FILE          | D   | 1.1     | *****NO GOVERNMENT FUNDING*****                                    |

Ordered from Bottom to top

1 . 1

---

**From:** Collar, Craig  
**Sent:** Monday, August 15, 2011 4:12 PM  
**To:** Cornwell, Tania; Kirchmeier, Bob; Martinsen, John  
**Cc:** Spahr, Jessica  
**Subject:** RE: Requisition 190714, Energy Storage System Fied Test Project

Hi Tania,  
This project will have no government or matching funds.

After discussing with Jeff, we think the CEII language will apply. Bob will have a better idea than me, but something like:

The DISTRICT expects such Critical Infrastructure Information to include details related to, but not limited by, *the District's substation, distribution infrastructure, and control systems.*

Bob/John...there is probably a better way to reflect what CEII actually applies?

**Craig W. Collar, P.E.**  
*Senior Manager, Energy Resource Development*  
*Snohomish PUD*  
*2320 California Street*  
*Everett, WA 98206*  
*425-783-1825*  
*cwcollar@snopud.com*

---

**From:** Cornwell, Tania  
**Sent:** Monday, August 15, 2011 2:57 PM  
**To:** Collar, Craig  
**Cc:** Spahr, Jessica  
**Subject:** Requisition 190714, Energy Storage System Fied Test Project  
**Importance:** High

Craig,

Please answer the following questions regarding the above-mentioned contract. Thanks!

- Will this contract be paid with government or matching funds? If your answer is yes, please provide the following:
  - Grant/Earmark/Stimulus Number: \_\_\_\_\_
  - Grant/Earmark/Stimulus Name: \_\_\_\_\_
  - Does the District have the funding yet?: \_\_\_\_\_
  - Have you obtained the terms and conditions?: \_\_\_\_\_
  - If you have the terms and conditions, who in legal has reviewed them?: \_\_\_\_\_

1.1

- Will the Consultant have access to any Critical Energy Infrastructure Information (CEII)? For Further information on CEII, please review the attached documentation provided by John Martinsen in Reliability Compliance & Regulatory Transmission. If you're contract does contain such information, the following will need to be added to your Scope of Work. It is the Project Leaders responsibility to complete the language below with the CEII information.

"In the performance of the work described in this scope of work, and in the performance of any work described in an amended contract or scope of work, the CONSULTANT will likely have access to Critical Infrastructure Information as that term is used in the Contract, and shall protect such information in accordance with the provisions of Article XIV, paragraph D (Directive 99 is attached as Exhibit C). Any Critical Infrastructure Information provided to the CONSULTANT will be prominently labeled as such by the DISTRICT. The DISTRICT expects such Critical Infrastructure Information to include details related to, but not limited by, XX."

For assistance in determining if your project contains CEII, you may contact John Martinsen at x8080 for help.

<< File: CEII.docx >>

Tania I. Jurado  
Snohomish County PUD  
Contracts/Purchasing Agent  
Phone: (425) 783-5667  
Fax: (425) 267-6523  
Email: tijurado@snopud.com

1.2

---

**From:** Toulson, Dana  
**Sent:** Monday, August 15, 2011 3:03 PM  
**To:** Cornwell, Tania  
**Subject:** RE: Updated: Energy Storage Project -- Competitive Waiver Exception Justification

Yes.

Thank you.

Dana Toulson  
Assistant General Manager  
Power, Rates and Transmission Management  
Snohomish County PUD  
datoulson@snopud.com  
425 783-8022

---

**From:** Cornwell, Tania  
**Sent:** Monday, August 15, 2011 2:56 PM  
**To:** Toulson, Dana  
**Subject:** RE: Updated: Energy Storage Project -- Competitive Waiver Exception Justification

Hi Dana,

Do you approve this competitive waiver?

---

**From:** Toulson, Dana  
**Sent:** Thursday, August 11, 2011 5:32 PM  
**To:** Collar, Craig  
**Cc:** Spahr, Jessica; Cornwell, Tania  
**Subject:** RE: Updated: Energy Storage Project -- Competitive Waiver Exception Justification

Both the Energy Storage Project and the Boart Longyer (sp?) items have been approved in Passport.

Cheers, Dana

---

**From:** Collar, Craig  
**Sent:** Thursday, August 11, 2011 4:04 PM  
**To:** Toulson, Dana  
**Cc:** Spahr, Jessica; Cornwell, Tania  
**Subject:** RE: Updated: Energy Storage Project -- Competitive Waiver Exception Justification

Hi Dana...attached is the Award Recommendation that also requires your approval. The requisition for this contract is in your Passport queue...thanks,

---

**Craig**



1.2

**From:** Collar, Craig  
**Sent:** Thursday, August 11, 2011 10:55 AM  
**To:** Toulson, Dana  
**Cc:** Spahr, Jessica; Cornwell, Tania  
**Subject:** Updated: Energy Storage Project -- Competitive Waiver Exception Justification

Hello Dana,

Below is an updated competitive waiver exception justification for the Energy Storage System Testing and Modeling Research Project. Please let me know of any questions or concerns.

Thanks,

Craig

**Energy Storage System Testing and Modeling Research Project  
\$800,000 contract proposed for 1Energy Systems Inc.**

The objective of the Energy Storage System Testing and Modeling Research Project is to 1) gain real-world experience implementing an energy storage system; and 2) to analyze and model variability and flexibility resources in the District's power distribution system, thereby simulating real-world conditions at scales not currently viable for energy storage device deployment. The planned duration of this project is 2.5 years.

The Energy Storage System Testing and Modeling Research Project will 1) field test a substation-scale energy storage system (likely Li-Ion batteries) in conjunction with Alstom Grid and/or other commercial partners; and 2) model and analyze potential flexibility in District power supply and demand, in conjunction with University of Washington researchers. The energy storage field test element of the project will give the District real-world experience installing and managing energy storage resources, and will generate key questions to be studied during the modeling phase of the project. The modeling portion of the project will simulate large-scale use of energy storage and other flexibility resources, enabling substantial insights and learning far earlier than would be feasible with actual deployments. Overall results will enable the District to determine applicability of energy storage and related technologies to District power supply, control and scheduling operations. This will inform District decision making and strategy relative to the most viable approach for leveraging ongoing advances in distributable energy storage technology towards the achievement of District business objectives.

1Energy Systems, Inc. (1Energy) will provide the District with support for all elements of the project including: overall project management; identification, on-boarding and management of key partners; system design; software development; analysis and modeling.

Grid energy storage is a nascent field, and there are very few entities experienced and qualified to perform this work. 1Energy's applicable experience and capabilities are unique, and include:

- Electric Vehicle Smart Charging System – Concept, design and development of first IT platform for managed ("smart") charging of electric vehicles (effectively, an energy storage management system).
- Wind-firming via Software-Controlled Energy Storage System – Concept, design and development of software platform for managing substation-scale energy storage systems in Xcel Energy's Wind-to-Battery project.
- Extensive knowledge of energy storage technologies and suppliers, and their strengths and limitations.
- Extensive network of technology industry relationships, essential to assess, form and manage the partnerships required.
- Extensive knowledge of District operations and how energy storage can be applied to create needed improvements in coming years.

1.2

Additionally, the District has been active in the energy storage and power control industries, and knows of no other consultants with the unique experience and capabilities necessary to provide the software and controls bridge between energy storage devices and the District's Supervisory Control and Data Acquisition platform.

**Craig W. Collar, P.E.**

*Senior Manager, Energy Resource Development*

*Snohomish PUD*

*2320 California Street*

*Everett, WA 98206*

*425-783-1825*

*cwcollar@snopud.com*

1.3

---

**From:** Collar, Craig  
**Sent:** Wednesday, August 17, 2011 11:24 AM  
**To:** Cornwell, Tania  
**Subject:** RE: Requisition 190714, Energy Storage System Fied Test Project

Hi Tania...John said he is good with this language...thanks,

**Craig W. Collar, P.E.**  
*Senior Manager, Energy Resource Development*  
*Snohomish PUD*  
*2320 California Street*  
*Everett, WA 98206*  
*425-783-1825*  
[cwcollar@snopud.com](mailto:cwcollar@snopud.com)

---

**From:** Collar, Craig  
**Sent:** Monday, August 15, 2011 4:12 PM  
**To:** Cornwell, Tania; Kirchmeier, Bob; Martinsen, John  
**Cc:** Spahr, Jessica  
**Subject:** RE: Requisition 190714, Energy Storage System Fied Test Project

Hi Tania,  
This project will have no government or matching funds.

After discussing with Jeff, we think the CEII language will apply. Bob will have a better idea than me, but something like:

The DISTRICT expects such Critical Infrastructure Information to include details related to, but not limited by, *the District's substation, distribution infrastructure, and control systems.*

Bob/John...there is probably a better way to reflect what CEII actually applies?

**Craig W. Collar, P.E.**  
*Senior Manager, Energy Resource Development*  
*Snohomish PUD*  
*2320 California Street*  
*Everett, WA 98206*  
*425-783-1825*  
[cwcollar@snopud.com](mailto:cwcollar@snopud.com)

---

**From:** Cornwell, Tania  
**Sent:** Monday, August 15, 2011 2:57 PM  
**To:** Collar, Craig  
**Cc:** Spahr, Jessica  
**Subject:** Requisition 190714, Energy Storage System Fied Test Project  
**Importance:** High

Craig,

1.3

Please answer the following questions regarding the above-mentioned contract. Thanks!

- Will this contract be paid with government or matching funds? If your answer is yes, please provide the following:
  - Grant/Earmark/Stimulus Number: \_\_\_\_\_
  - Grant/Earmark/Stimulus Name: \_\_\_\_\_
  - Does the District have the funding yet?: \_\_\_\_\_
  - Have you obtained the terms and conditions?: \_\_\_\_\_
  - If you have the terms and conditions, who in legal has reviewed them?: \_\_\_\_\_
- Will the Consultant have access to any Critical Energy Infrastructure Information (CEII)? For Further information on CEII, please review the attached documentation provided by John Martinsen in Reliability Compliance & Regulatory Transmission. If you're contract does contain such information, the following will need to be added to your Scope of Work. It is the Project Leaders responsibility to complete the language below with the CEII information.

"In the performance of the work described in this scope of work, and in the performance of any work described in an amended contract or scope of work, the CONSULTANT will likely have access to Critical Infrastructure Information as that term is used in the Contract, and shall protect such information in accordance with the provisions of Article XIV, paragraph D (Directive 99 is attached as Exhibit C). Any Critical Infrastructure Information provided to the CONSULTANT will be prominently labeled as such by the DISTRICT. The DISTRICT expects such Critical Infrastructure Information to include details related to, but not limited by, XX."

For assistance in determining if your project contains CEII, you may contact John Martinsen at x8080 for help.

<< File: CEII.docx >>

**Tania I. Jurado**  
**Snohomish County PUD**  
**Contracts/Purchasing Agent**  
**Phone: (425) 783-5667**  
**Fax: (425) 267-6523**  
**Email: tijurado@snopud.com**

1.4

**EPLS**

Excluded Parties List System

**Search Results Excluded By  
Firm, Entity, or Vessel : 1ENERGY SYSTEMS INC  
as of 17-Aug-2011 3:11 PM EDT**

---

**Your search returned no results.**



1.5

**From:** Cornwell, Tania  
**Sent:** Wednesday, August 03, 2011 9:45 AM  
**To:** Spangler, Anne  
**Cc:** Waterman, Susan  
**Subject:** David Kaplan  
**Attachments:** STANDARD Boilerplate (Rev. 2 8 11)-1\_1Energy\_2011-08-01.docx; SOW\_1Energy.docx

**Importance:** High

| <b>Tracking:</b> | <b>Recipient</b> | <b>Read</b>             |
|------------------|------------------|-------------------------|
|                  | Spangler, Anne   | Read: 8/3/2011 10:59 AM |
|                  | Waterman, Susan  |                         |

Hi Anne,

I just received this contract request and modified boilerplate from Craig Collar's group. They are hoping to get on the August 16<sup>th</sup> commission agenda, which means my deadline is Friday to submit to Judy. Jessica Spahr said you and Risk have already been involved in talks with this consultant, and she believed this boilerplate had already been approved. If you have approved, may I have the boilerplate initialed in the footer indicating so? If you have not reviewed and don't believe it can be returned by Friday, please let me know and I will suggest the Temporary Notice again.

Thanks!

---

**From:** Spahr, Jessica  
**Sent:** Wednesday, August 03, 2011 8:34 AM  
**To:** Cornwell, Tania  
**Subject:** 1Energy PSC

Hi Tania,

I started a contract requisition (req. 190714) for 1Energy Systems, for Craig Collar. David Kaplan from 1Energy has made some markups to the boilerplate discussed below. Do you see any problem getting this to the commission for the August 16 date? Craig has submitted the competitive waiver justification to Dana Toulson but I don't think we have her approval yet – should be soon. I also didn't fill in the accounting portion of the requisition yet as I still have to confirm the accounting numbers, but I wanted to make you aware of it as there has already been internal discussion with Steve Klein and legal as you can see below.

Thanks,

*Jessica Spahr*

---

**From:** Collar, Craig  
**Sent:** Monday, August 01, 2011 12:35 PM  
**To:** Spahr, Jessica  
**Subject:** FW: finalizing PSC

Here are the Energy Storage documents....if you can get started with Tania I will get the competitive waiver justification together...thanks,

1.5

**Craig W. Collar, P.E.**

Senior Manager, Energy Resource Development  
Snohomish PUD  
2320 California Street  
Everett, WA 98206  
425-783-1825  
[cwcollar@snopud.com](mailto:cwcollar@snopud.com)

**From:** David Kaplan [mailto:[davek@1energysystems.com](mailto:davek@1energysystems.com)]

**Sent:** Sunday, July 31, 2011 7:32 PM

**To:** Collar, Craig; Spangler, Anne

**Cc:** Toulson, Dana; Klein, Steve

**Subject:** finalizing PSC

Craig and Anne, attached is markup of PSC boilerplate reflecting my atty's comments and mine. I've also attached latest SOW, discussed and finalized at our 7/18 mtg (Craig, Dana, Steve and me).

A few specific issues to note:

- Boilerplate markup reflects:

- 1) (Article IX) - Division of I/P rights, patterned after our discussions last fall (I used Anne's proposed language).
- 2) (Article IV) - Discount ability we discussed on 7/18, allows 1Energy to reduce cumulative billings as needed to keep in proportion to contract maximum. Also, late charges on delayed payments.
- 3) (Article VIII) - Remove requirement for errors & omissions insurance (per my agent this would increase my insurance cost 8-10x). Since this is an R&D project, I'm hoping this is OK.
- 4) (Article XI) - Make indemnity symmetric.

Regarding timing, we should aim for Aug 22 contract start, to support Aug 31 project kickoff mtg in Everett (already scheduled with Alstom, AV, S&C).

Please advise if this is feasible (requires Aug 16 Commission approval?) and next steps.

Thanks,  
Dave

David Kaplan  
1Energy Systems, Inc.  
[davek@1energysystems.com](mailto:davek@1energysystems.com)  
206.919.0206

1.5



EXHIBIT B  
PROFESSIONAL SERVICES CONTRACT NO. XXXX

This contract is entered into by and between PUBLIC UTILITY DISTRICT NO. 1 OF SNOHOMISH COUNTY (hereinafter referred to as DISTRICT), located at 2320 California Ave., Everett, Washington, and ~~KEYBOARD~~ Energy Systems, Inc. (hereinafter referred to as CONSULTANT), located at ~~Keyboard 610 W Prospect St, Seattle, WA, 98119.~~

The parties to this contract agree as follows:

**ARTICLE I - SCOPE OF SERVICES**

The CONSULTANT shall perform, or cause to be performed, the services generally described below and identified and defined as CONSULTANT responsibilities throughout this contract and which are more fully described in Exhibit A - Scope of Work, attached hereto and made a part hereof. Project Description: ~~Keyboard Energy Storage System (ESS) field test project and Flexibility Analysis and Modeling (FAM) research project.~~

Formatted: Font: Not Bold

**ARTICLE II - INDEPENDENT CONTRACTOR**

It is understood and mutually agreed upon by the parties that the CONSULTANT shall perform the services pursuant to this contract as an Independent Contractor and not as an agent or employee of the DISTRICT.

**ARTICLE III - NOTICE TO PROCEED AND TIME OF PERFORMANCE**

The term of this contract shall be ~~Keyboard August 22, 2011~~ through ~~Keyboard November 30, 2013~~. The CONSULTANT shall begin work in accordance with the DISTRICT'S Notice to Proceed. Any costs incurred by CONSULTANT prior to the Notice to Proceed shall not be reimbursed by the DISTRICT. The CONSULTANT shall complete all specified contract work, including submission of reports and other required documentation, within the schedules set forth in Exhibit A - Scope of Work. Any revision of such schedules shall be by mutual agreement, in writing, between the DISTRICT and the CONSULTANT.

**ARTICLE IV - COMPENSATION AND PAYMENT**

- A. The DISTRICT shall pay the CONSULTANT for services rendered as detailed in Exhibit A. However, there shall be no advance payment for services furnished pursuant to this contract.
- B. Payment made to the CONSULTANT shall not constitute acceptance of the work or any portion thereof which is not in accordance with this contract. The DISTRICT retains the right to pay only that portion of the total contract amount that is proportionate to the amount of work completed as compared to the total amount of work required to be performed under this contract.
- C. The DISTRICT'S total cost for all work performed by the CONSULTANT under this contract, including reasonable and necessary reimbursable expenses to the extent authorized in the Scope of Work, shall not exceed ~~Keyboard eight hundred thousand~~ and 00/100 dollars (\$~~Keyboard 800,000.00~~). Reasonable and necessary expenses shall be billed at actual cost (other than mileage and Per Diem rates as set forth below) and shall conform to the following criteria except to the extent specifically authorized in advance, in writing, by the DISTRICT:
  1. The mileage rate shall not exceed the current Internal Revenue Services (IRS) rates per mile as allowed for business related travel. Parking shall be the actual cost. When rental vehicles are authorized, government rates shall be requested and luxury or utility vehicles shall not be utilized; provided, however, that utility vehicles may be authorized if approved in advance, in writing, when reasonably required to perform the services described in the Scope of Work.

1.5

SAMPLE



1.5

**ARTICLE IV - COMPENSATION AND PAYMENT (continued)**

2. Reimbursement for meals shall be limited to the Per Diem rates established by Federal travel requisitions for the host city in the code of Federal Regulations, 41 CFR Section 301 (M&IE).
  3. Lodging shall be in a hotel within a ten-mile radius of the work site except where no hotel is available within ten miles of the work site, in which case alternative lodging shall be approved in writing in advance by the DISTRICT.
  4. Air travel shall be by coach at the lowest available price.
  5. If authorized in the Scope of Work, costs including but not limited to telephone expenses, reproduction costs, photographing, telecopying, photocopying, printing, express delivery charges, commercial printing and binding, etc., shall be billed at actual cost. The following items are not allowable expenses: alcohol, entertainment, in-room minibar charges and valet parking. Laundry services are only reimbursable during stays of one week or more.
- D. The CONSULTANT shall provide the DISTRICT with invoices of all labor costs and copies of original, detailed receipts for all expenses incurred on the project for which reimbursement is authorized (with the exception of meal expenses, which shall be reimbursed at the Per Diem rates described in subsection C.2. above). Invoices must be provided no later than the end of the month following the month in which the services were provided. The CONSULTANT may, at CONSULTANT's sole option, discount all or any portion of an invoice provided to the DISTRICT.
- E. The DISTRICT shall pay the CONSULTANT within thirty (30) days after receipt and approval of the CONSULTANT'S invoices. Payments not made within such time period shall be subject to late charges equal to the lesser of (a) one and one-half percent (1.5%) per month of the overdue amount or (b) the maximum amount permitted under applicable law. The DISTRICT will reimburse the CONSULTANT for any costs or expenses (including, but not limited to, reasonable attorney fees) incurred by the CONSULTANT to collect any amount that is not paid by the DISTRICT when due. In the event an invoice remains unpaid forty-five (45) or more days from the invoice date, the CONSULTANT may, in its discretion, suspend providing work under the contract without any liability to the CONSULTANT until such invoice is paid in full.

**ARTICLE V - ASSIGNMENT AND SUBCONTRACTS**

This contract shall not be assigned by either party, either in whole or in part, without the prior written approval of the other. Any attempted assignment without such written consent shall be void.

- A. As required by the work and as approved in writing by the DISTRICT, the CONSULTANT may enter into contracts with other firms for services not normally performed by the CONSULTANT.
- B. Any subcontract entered into by the CONSULTANT subsequent to the execution of this contract must be approved in writing by the DISTRICT. This provision shall be included in all subcontracts with contractors and/or consultants with whom the CONSULTANT will acquire services.
- C. The CONSULTANT shall also include a provision in all subcontracts that, in the event the CONSULTANT'S services are terminated, the CONSULTANT or the DISTRICT shall have the right to terminate the subcontract for the CONSULTANT'S or the DISTRICT'S convenience, or assign the subcontract to the DISTRICT at the DISTRICT'S option.
- D. Any subcontracted services shall be billed to the DISTRICT at the CONSULTANT'S cost, except to the extent a markup on such costs is specifically authorized in the Scope of Work; provided that in no event will such markup exceed 10% of such costs.

**ARTICLE VI - CONTROL AND APPROVAL**

The CONSULTANT shall appoint a Project Manager who will be in charge of the project for the CONSULTANT and have authority to make binding decisions on behalf of the CONSULTANT. All



1.5

notices regarding changes in the project or revisions to the Scope of Work shall be delivered to the designated Project Manager. The CONSULTANT'S Project Manager for this project will be:

SAMPLE

1.5

**ARTICLE VI - CONTROL AND APPROVAL (continued)**

Name: David Kaplan

Title: CEO

Email Address: davek@1energysystems.com

Mailing Address: 610 W Prospect St.

City, State, Zip: Seattle, WA 98119

Phone Number: 206.919.0206

Fax Number: \_\_\_\_\_

- A. The CONSULTANT shall not change or replace its Project Manager without the prior written approval of the DISTRICT.
- B. The DISTRICT shall have the right to review personnel assigned to perform the services required of the CONSULTANT and the right to require the CONSULTANT to replace any individual who, in the commercially reasonable opinion of the DISTRICT'S Project Leader, is unqualified or otherwise unfit to perform such services.
- C. The CONSULTANT shall proceed with due diligence upon the work necessary to satisfy the terms of this contract. The DISTRICT at all times shall have access to the work being performed by the CONSULTANT under this contract, including information regarding the progress of the work and other matters pertaining thereto.
- D. The DISTRICT'S Project Leader will be in charge of the project for the DISTRICT and have authority to make decisions on behalf of the DISTRICT. The DISTRICT'S Project Leader for this project will be:

Name: Craig Collar

Title: Sr. Mgr., Energy Resource Development

Email Address: cwcollar@snopud.com

Mailing Address: 2320 California Street

City, State, Zip: Everett, WA 98201

Phone Number: (425) 783-1825

Fax Number: \_\_\_\_\_

- E. The DISTRICT shall not change or replace its Project Leader without giving prior written notice to the CONSULTANT.

**ARTICLE VII - PUBLIC RECORDS AND AUDIT RIGHTS**

- A. The DISTRICT is subject to Washington's Public Records Act, Chapter 42.56 RCW (the "Act"), and the Act defines "public record" very broadly. Any records or documents, including electronic records, relating to or arising out of this contract are subject to that Act.
- B. Public Records, including this contract, may be required to be made available for inspection or copying if a request to do so is received by the DISTRICT. Any such request received by the CONSULTANT, including oral requests, must be referred to a DISTRICT Public Records Officer immediately so that the DISTRICT may acknowledge the request within five (5) business days of receipt. The CONSULTANT shall not make Public Records available to anyone requesting them unless authorized to do so by the DISTRICT.



1.5

**ARTICLE VII – PUBLIC RECORDS AND AUDIT RIGHTS (continued)**

- C. The CONSULTANT must retain all Public Records for a period of at least six years following completion of the Contract. As an alternative to retaining Public Records after the conclusion of the contract the CONSULTANT may deliver such Records to the DISTRICT in a format compatible with DISTRICT records retention and retrieval systems. At or following the conclusion of the six-year period, the CONSULTANT must notify the DISTRICT if it intends to destroy any Public Records, and provide the DISTRICT the option to retain such records in lieu of destruction.
- D. During this contract and for two years thereafter, the DISTRICT and its agents shall have the right to inspect and to perform audits of the CONSULTANT'S records pertaining to this contract.
- E. The CONSULTANT shall make records available as required by this Article without charge to the DISTRICT.

**ARTICLE VIII – INSURANCE**

- A. Prior to the commencement of any work under this contract, and at all times during the term of this contract, CONSULTANT shall obtain and maintain continuously, at its own expense a policy, or policies of insurance as enumerated below. All insurance required by this contract will be primary to any insurance carried by the DISTRICT. CONSULTANT shall have no right to call upon or seek contribution from any insurance carried by the DISTRICT or of its additional insured's.
- B. The CONSULTANT shall, during the term of this contract, comply with all applicable Worker's Compensation Statutes, and in the case of any work sublet, the CONSULTANT shall require the subconsultant similarly to comply with all Worker's Compensation Statutes. Prior to start of work, if applicable, the CONSULTANT and each of its subconsultants shall provide the DISTRICT with a Certificate of Coverage issued by the Department of Labor & Industries, State of Washington. If not insured through the State of Washington, CONSULTANT shall provide a Certificate of Insurance evidencing Workers Compensation coverage by a qualified insurer with minimum limits of \$1,000,000. The CONSULTANT shall also take out and maintain during the term of this contract, Employer's Liability Insurance and/or Washington Stop Gap Employer's Liability Insurance with a minimum limit of \$1,000,000 per accident and per employee disease with an insurance company authorized to write such insurance.
- C. ~~The CONSULTANT shall keep in force during the contract period, professional liability insurance ("Errors and Omissions") coverage for acts, errors and omissions arising out of the scope of services in the contract with a minimum limit of \$1,000,000 per occurrence/annual aggregate. (Note: higher limits may be requested for larger contracts or high-hazard exposure.) If the insurance coverage provided is written on a claims-made form, the retroactive date shall be prior to or coincident with the effective date of this contract. The insurance certificate shall state the coverage is claims-made and state the retroactive date. Claims-made form coverage shall be maintained by the CONSULTANT for a minimum of three (3) years following the termination of this contract, continuing to cover all negligent acts, errors, and omissions of or by CONSULTANT, its agents, and subconsultants under this contract. The CONSULTANT shall annually provide the DISTRICT with proof of renewal. If renewal of the claims-made form of coverage becomes unavailable, or economically prohibitive, the CONSULTANT shall purchase an Extended Reporting Period Tail or execute another form of guarantee acceptable to the DISTRICT in its sole discretion to assure financial responsibility for liability for services performed under this contract.~~

1.5

**ARTICLE VIII – INSURANCE (continued)**

- D-C.** The CONSULTANT shall keep in force during the contract period Commercial General Liability insurance written on an occurrence form which shall include the following: bodily injury, including wrongful death, property damage, including loss thereof, along with premises/operations liability, products/completed operations, personal/advertising injury, contractual liability, stop gap or employers contingent liability and fire damage legal liability with minimum acceptable limits of \$1,000,000 per occurrence. The Commercial General Liability policy shall not exclude: broad form contractual liability, broad form property damage including completed operations, XCU coverage or independent contractor's liability.
- E-D.** The CONSULTANT shall keep in force during the contract period Business Automobile Liability insurance including coverage for owned, non-owned, leased or hired vehicles used by or for CONSULTANT in any capacity in connection with carrying out this contract, written to include bodily injury, including wrongful death, and property damage, including loss of use thereof, with minimum acceptable limits of \$1,000,000 per occurrence.
- F-E.** Such insurance in paragraphs D and E above, shall include the DISTRICT, its directors, officers, elected officials, employees and agents as additional insureds with respect to the DISTRICT'S liability arising out of or related to CONSULTANT'S negligence in the performance of services under this contract.
- G-F.** The CONSULTANT shall furnish the DISTRICT with a certificate(s) and endorsement(s) showing evidence of insurance coverage as defined in paragraphs A, B, C, D, **E** and **F-E** above, or with other adequate evidence of such coverage which may be accepted by the DISTRICT, in its sole discretion, in lieu of such certificate. All policy coverage required under paragraphs **D-C** and **E-D** above shall be written on an occurrence basis. Insurance policies shall be obtained and maintained with companies rated A- or better by A.M. Best Co.'s Key Rating Guide. No policy may be canceled or materially altered by the insurance company without giving thirty (30) days prior written notice of cancellation, lapse or material alteration to the DISTRICT.
- H-G.** Nothing contained in these insurance requirements shall be construed as limiting the extent of the CONSULTANT'S responsibility for payment of damages resulting from its operations under this contract.
- I-H.** The CONSULTANT shall require and ensure that each of its subconsultants meets the insurance requirements and specifications of this contract. All coverages for subconsultants shall be subject to all of the requirements stated herein unless the DISTRICT determines in writing that specific types of coverage are inapplicable to a subconsultant's profession. The CONSULTANT shall require each of its subconsultants to furnish to the CONSULTANT a Certificate of Insurance showing evidence of such coverage.



1.5

**ARTICLE IX – WORK PRODUCT**

~~All~~ The CONSULTANT will retain exclusive rights to all "Work Product," including all intellectual property rights, ~~it~~ the CONSULTANT develops in the course of its work, including, without limitation, documents, data, studies, surveys, drawings, maps, photographs and any object or source code for any software developed pursuant to or in connection with this contract, as well as any copyrights, patents, trade secrets, trademarks or other intellectual property developed for or in connection with this contract, provided, however, that 1) the DISTRICT will retain ownership of data related to its operations, and 2) the DISTRICT and CONSULTANT will retain joint ownership of use cases, functional specifications and findings developed in the course of CONSULTANT's work. ~~shall be work for hire and shall be the property of the DISTRICT. CONSULTANT does hereby transfer and assign any rights in the Work Product that it has or that may arise out of or in connection with this contract to the DISTRICT.~~ CONSULTANT further agrees that, at the conclusion of this contract, or at any time before or after that time, upon request of the DISTRICT, CONSULTANT shall confirm the rights set forth in this paragraph, which rights shall survive termination of this contract, and shall deliver to the DISTRICT all copies of the Work Product in its possession to which the DISTRICT retains ownership rights. Notwithstanding any other provision of this paragraph, CONSULTANT shall have the right to maintain copies of records as required by its record keeping or reporting responsibilities under applicable law provided CONSULTANT does not otherwise use or disclose such records.

**ARTICLE X – TERMINATION**

- A. The DISTRICT may terminate this contract at any time by giving the CONSULTANT 30 days' written notice of such termination, ~~unless otherwise specified by the DISTRICT~~. In such event, the CONSULTANT shall stop the performance of the CONSULTANT'S services hereunder except on work, mutually agreed upon in writing between the CONSULTANT and the DISTRICT, necessary to carry out such termination.
- B. In the event of termination, the DISTRICT shall pay to the CONSULTANT all contract costs incurred prior to termination and incurred in connection with mutually agreed upon work to carry out the termination. The CONSULTANT shall not be entitled to compensation for lost profit or expectations of profit due to the DISTRICT'S early termination of this contract. All payments shall comply with ARTICLE IV-B above.
- C. In the event of termination, the CONSULTANT shall provide the DISTRICT with all finished and unfinished Work Product prepared by the CONSULTANT under this contract to which the DISTRICT retains ownership rights. Such materials shall be the property of the DISTRICT, unless otherwise specified in ARTICLE IX above ~~writing by both parties~~. Notwithstanding any other provision of this paragraph, CONSULTANT shall have the right to maintain copies of records as required by its record keeping responsibilities under applicable law ~~provided CONSULTANT does not otherwise use or disclose such records~~.

**ARTICLE XI - INDEMNIFICATION, DISCLAIMER AND LIMITATIONS**  
**DISTRICT HELD HARMLESS**

- A. The CONSULTANT hereby indemnifies and agrees to hold harmless and release the DISTRICT and its commissioners, officers, employees and agents and each of the heirs, personal representatives, successors and assigns of any of the foregoing from and against any and all liabilities, losses, claims, damages, costs, demands, fines, judgments, penalties, obligations and payments, together with any reasonable costs and expenses (including, without limitation, reasonable attorneys' fees and out-of-pocket expenses and reasonable costs and expenses of investigation) incurred in connection with any of the foregoing, to the extent they result from, relate to or arise out of or in connection with (i) any failure of the CONSULTANT (or anyone directly or indirectly employed by the CONSULTANT, including subconsultants of the CONSULTANT) duly to perform or observe any term, provision, covenant, agreement or condition hereunder to be performed or observed by or on behalf of the CONSULTANT or (ii) any



1.5

negligence or intentional misconduct of the CONSULTANT (or anyone directly or indirectly employed by the CONSULTANT, including subconsultants of the CONSULTANT).

SAMPLE

1.5

**ARTICLE XI - INDEMNIFICATION, DISCLAIMER AND LIMITATIONS**  
**DISTRICT HELD HARMLESS (continued)**

- B.** Solely and expressly for purposes of its duties to indemnify and hold harmless the DISTRICT as set forth above, the CONSULTANT specifically waives any immunity it might have under the State Industrial Insurance law, Title 51 RCW, or any similar worker's compensation act, in the event that a claim is made against the DISTRICT for an injury to any employee of CONSULTANT. THE CONSULTANT ACKNOWLEDGES THAT THIS WAIVER HAS BEEN MUTUALLY NEGOTIATED BY THE PARTIES.
- C.** The DISTRICT hereby indemnifies and agrees to hold harmless and release the CONSULTANT and its directors, officers, employees and agents and each of the heirs, personal representatives, successors and assigns of any of the foregoing from and against any and all liabilities, losses, claims, damages, costs, demands, fines, judgments, penalties, obligations and payments, together with any reasonable costs and expenses (including, without limitation, reasonable attorneys' fees and out-of-pocket expenses and reasonable costs and expenses of investigation) incurred in connection with any of the foregoing, to the extent they result from, relate to or arise out of or in connection with (i) any failure of the DISTRICT (or anyone directly or indirectly employed by the DISTRICT) duly to perform or observe any term, provision, covenant, agreement or condition hereunder to be performed or observed by or on behalf of the DISTRICT or (ii) any negligence or intentional misconduct of the DISTRICT (or anyone directly or indirectly employed by the DISTRICT).
- D.** **DISCLAIMER OF WARRANTIES.** EXCEPT AS OTHERWISE PROVIDED IN THIS CONTRACT, ALL WORK AND SERVICES PROVIDED BY THE CONSULTANT ARE PROVIDED "AS IS" AND WITHOUT ANY WARRANTY. THE CONSULTANT DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUALITY OF INFORMATION, TITLE AND NON-INFRINGEMENT.
- B-E.** **LIMITATION OF LIABILITY AND DAMAGES.** THE CONSULTANT AND ITS DIRECTORS, OFFICERS, EMPLOYEES AND AGENTS SHALL HAVE NO LIABILITY TO THE DISTRICT FOR ANY LOSS OF PROFITS, SALES, BUSINESS, DATA OR OTHER INCIDENTAL, CONSEQUENTIAL OR SPECIAL LOSS OR DAMAGE OF ANY KIND OR NATURE, INCLUDING EXEMPLARY AND PUNITIVE DAMAGES, RESULTING FROM OR ARISING OUT OF THIS CONTRACT OR ANY SCOPE OF WORK OR OTHER ORDER FORM. THE TOTAL LIABILITY OF THE CONSULTANT AND ITS DIRECTORS, OFFICERS, EMPLOYEES AND AGENTS TO THE DISTRICT ARISING OUT OF THIS CONTRACT OR ANY SCOPE OF WORK OR OTHER ORDER FORM SHALL NOT EXCEED THE TOTAL FEES PAID TO THE CONSULTANT BY THE DISTRICT DURING THE SIX (6) MONTHS IMMEDIATELY PRECEDING THE EVENT GIVING RISE TO THE LIABILITY.

**ARTICLE XII - WASHINGTON RETIREMENT SYSTEMS RETIREES**

Has the CONSULTANT (company owner) retired from the State of Washington using the 2008 PERS Early Reduction Factors? Yes ☐ or No ☒. If yes, the CONSULTANT must furnish the DISTRICT with the CONSULTANT'S name and social security number which will be furnished to the Washington Department of Retirement Systems.

**ARTICLE XIII - CHANGES AND EXTRA WORK**

The DISTRICT reserves the right to order and approve changes within the scope of the CONSULTANT'S services hereunder by a written Amendment executed by the parties, and no modification to this contract may be enforced against a party which has not so consented in writing. All Amendments, when properly executed, shall become a part of this contract. ~~Any work performed by the CONSULTANT prior to the execution of the amendment(s) by both parties shall be at the CONSULTANT'S expense if the amendment increases the original contract amount.~~



1.5

**ARTICLE XIV – SECURITY OF ELECTRONIC AND NATIONAL SECURITY INFORMATION**

- A. The CONSULTANT may have access to the DISTRICT data network, (the “Corporate” Network) only if that access is required by the Scope of Work, ~~and then only with DISTRICT-owned equipment~~. When using the Corporate Network the CONSULTANT shall comply with Directive 99, DISTRICT Information Security, as it may be amended. A copy of Directive 99 will be furnished the Consultant upon request.
- B. If the CONSULTANT requires access to the Internet while performing this contract the CONSULTANT may utilize the DISTRICT’S Internet access (the “Guest” Network) for that purpose and when doing so may use equipment that is not owned by the DISTRICT. The CONSULTANT shall not use the DISTRICT Corporate Network for Internet access.
- C. The CONSULTANT may arrange access to either the Corporate Network or to the Guest Network through the Information Technology Services (ITS) help desk with 48-hours’ advance notice.
- D. The CONSULTANT may have access to any Critical Infrastructure Information only if that access is required by the Scope of Work. If such access is authorized by the Scope of Work, an effort will be made to identify it in the Scope of Work. If such access is required by the Scope of Work, whether or not specifically identified, the CONSULTANT shall: (i) comply with all written requirements and instructions furnished to the CONSULTANT by a District Critical Infrastructure Information Officer; (ii) treat all Critical Infrastructure Information as privileged and confidential, and release the information to any third party, or to any of the CONSULTANT’s employees, contractors, subconsultants, officers, or agents, only upon the DISTRICT’s written consent; and (iii) if instructed by the DISTRICT to file any Critical Infrastructure Information with any federal, state, or local government, prominently mark such

1.5

**ARTICLE XIV – SECURITY OF ELECTRONIC AND NATIONAL SECURITY INFORMATION**  
**(continued)**

information as Critical Electric Infrastructure Information in accordance with 6 C.F.R. § 29.5(a)(3) and ensure that such information is protected in accordance with all applicable laws and regulations. The CONSULTANT, and any employee, contractor, subconsultant, officer or agent of the CONSULTANT with access to information concerning any Critical Infrastructure Information shall read and comply with any and all NERC, WECC, FERC, and DISTRICT policies concerning protection of Critical Infrastructure Information, and shall attend such training programs or seminars as the DISTRICT may require. For purposes of this Subsection D, "Critical Infrastructure Information" means any and all information concerning any Critical Asset or Cyber Critical Asset, as identified pursuant to North American Electric Reliability Corporation ("NERC") Standard CIP-002 (including any revision or modification of that Standard adopted by NERC or the Western Electricity Coordinating Council ("WECC")) and any information identified as Critical Energy Infrastructure Information by the Federal Energy Regulatory Commission in 18 C.F.R. §388.113, including any revisions or modifications thereto.

**ARTICLE XV – PUBLICATIONS**

The CONSULTANT shall not publicize or advertise at any time any articles, photos, drawings, technical data or other information regarding the project without the prior written approval of the DISTRICT.

**ARTICLE XVI – CONFIDENTIALITY**

- A. The CONSULTANT, including its officers, agents, and employees, shall hold and maintain as confidential all information concerning its study findings and recommendations in connection with the project, the business of the DISTRICT, the DISTRICT'S financial affairs, and the DISTRICT'S relations with its employees and customers, as well as any other information which may be specifically classified as confidential by the DISTRICT.
- B. If the CONSULTANT provides the DISTRICT with documents or "writings" (as defined in the Washington Public Records Act, Chapter 42.56 RCW) that the CONSULTANT considers to be confidential or proprietary, the CONSULTANT must prominently mark such documents "Confidential" upon all applicable pages or inform the DISTRICT of that claim in writing regarding electronic records. If the DISTRICT receives a Public Records request or a subpoena for any of those documents or "writings" it will not release them, unless required to do so, sooner than ten (10) days after giving the CONSULTANT written notice in the manner provided herein to allow the CONSULTANT to commence litigation to prevent the release. The entire expense of such litigation including the DISTRICT'S attorneys' fees and costs and any amounts that the DISTRICT is required to pay, specifically including any damages imposed upon the DISTRICT for any failure or delay in releasing the records, shall be paid by the CONSULTANT. The DISTRICT shall have no liability for releasing the documents or "writings" if the CONSULTANT does not commence litigation, as established by court papers served upon the DISTRICT, to prevent release within the ten (10) day notice period.



1.5

**ARTICLE XVII - DEBARMENT CERTIFICATION**

The CONSULTANT certifies that the CONSULTANT is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in this Agreement by any Federal department or agency. The CONSULTANT shall immediately provide written notice to the DISTRICT if at any time the CONSULTANT learns that it has become debarred, suspended, proposed for debarment, declared ineligible or is voluntarily excluded from participating in this Agreement by any Federal department or agency, or if at any time the CONSULTANT learns that this certification was erroneous when submitted or has become erroneous by reason of changed circumstances. In addition, the CONSULTANT shall not award any subcontract under this Contract to any party which is debarred, suspended or otherwise excluded from or ineligible for participation (as more fully described above) in any Federal assistance programs, except with the express written consent of the District.

**ARTICLE XVIII - NOTICES**

All notices required to be given hereunder shall be deemed to be sufficiently given if delivered in person or if sent by U.S. Mail, postage prepaid, to the DISTRICT'S Project Leader or to the CONSULTANT'S Project Manager at the addresses set forth above or to the Office of the General Manager of the DISTRICT, or the Office of the CONSULTANT at the addresses set forth below. Either party may designate other addresses from time to time by giving written notice to the other but notice to more than one address cannot be required. Notice given by U.S. Mail shall be presumed to be received three (3) days after mailing on any day other than a Sunday or a legal holiday. If the last day of the three (3) day period is a Saturday, Sunday or legal holiday the period shall be extended to the end of the next day which is neither a Saturday, Sunday or legal holiday.

Office of the DISTRICT General Manager:

Street Address: 2320 California Street  
Everett, WA 98201

Mailing Address: P.O. Box 1107  
Everett, WA 98206-1107

Office of the CONSULTANT:

Street Address: 610 W Prospect St.

Seattle, WA 98119

Mailing Address: - same -

**ARTICLE XIX - NONWAIVER**

The failure of the DISTRICT to insist upon or enforce strict performance by the CONSULTANT of any provision of this contract, or to exercise any right under this contract, shall not be construed as a waiver or relinquishment to any extent of the DISTRICT'S right to assert or rely upon any such provision or right in that or any other instance; rather, the same shall be and remain in full force and effect.



1.5

**ARTICLE XX - ENTIRE AGREEMENT**

The DISTRICT and the CONSULTANT understand and agree that this document constitutes the whole contract between them and supersedes all other prior agreements and understandings, whether oral or written. This contract shall not be modified or amended except by written Amendment.

**ARTICLE XXI - GOVERNING LAW**

This contract shall be governed by the laws of the State of Washington (without regard to any conflicts of law principles applied in that State), with venue for any disputes in Snohomish County, Washington; provided that venue for any matter that is within the jurisdiction of the Federal Court shall be in the United States District Court for the Western District of Washington at Seattle, Washington. Each Party hereby irrevocably waives, to the fullest extent it may effectively do so, the defense of an inconvenient forum to the maintenance of proceedings in such courts.

IN WITNESS WHEREOF, the parties hereto have entered into this contract:

PUBLIC UTILITY DISTRICT NO. 1  
OF SNOHOMISH COUNTY

**KEYBOARD ENERGY SYSTEMS, INC.**

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Judy Spence

David Kaplan

TITLE: Manager, Contracts & Purchasing

TITLE: CEO

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

1.5

## **I. Description**

1 Energy Systems, Inc. ("Consultant") will provide the District with:

- **Energy Storage System (ESS) field test project** – System design, software development, partner management and project management services as required to conduct the Energy Storage System (ESS) field test project.  
Partners: Alstom Grid, EPRI, others TBD
- **Flexibility Analysis and Modeling (FAM) research project** – Analysis, modeling, partner management and project management services as required to conduct the Flexibility Analysis and Modeling (FAM) research project.  
Partners: University of Washington, others TBD

## **II. Scope of Work**

Refer to attachment EXHIBIT A:

ENERGY STORAGE SYSTEM (ESS) PROJECT  
FLEXIBILITY ANALYSIS AND MODELING (FAM) PROJECT  
SCOPE OF WORK

## **III. Contract Schedule**

Work shall commence upon Consultant's receipt of written "Notice to Proceed." The estimated completion date is November 2013.

## **IV. Locations**

The ESS and FAM projects will be conducted online and within Snohomish and King Counties, Washington.

## **V. Payment**

The Consultant shall submit invoices detailing all hours worked by each employee of the Consultant under this Contract per the rate schedules below and all expenses the District has agreed to reimburse as shown below. All invoices shall be sent directly to the District's Project Leader on a monthly basis.

The District will pay the Consultant for services performed in accordance with the terms and conditions of the Contract and pursuant to negotiated billing rates set in the following schedule. The District's total cost for all work performed by the Consultant under this contract, including reasonable and necessary reimbursable expenses to the extent authorized below, shall not exceed eight-hundred thousand and 00/100 dollars (\$800,000.00).

| LABOR CATEGORY        | HOURLY RATE |
|-----------------------|-------------|
| Project Leader        | \$250       |
| Sr. Program Manager   | \$175       |
| Sr. Software Engineer | \$175       |
| Software Engineer     | \$125       |

1.5

| Reimbursable Expenses                  | Rates                                  |
|--|--|
| Equipment Rental                       | Cost                                   |
| Local travel                           | \$0.555/mile (or current Federal rate) |
| Remote travel (airfare, lodging, etc.) | Cost                                   |
| Outside reproduction                   | Cost                                   |
| Transportation by public carrier       | Cost                                   |
| Outside services or subcontractors     | Cost + 10%                             |
| Materials and supplies                 | Cost                                   |

Reimbursable expenses associated with this contract are limited to those identified above.

## **VI. District Project Leader**

The District's Project Leader for this project is:

Craig Collar  
Senior Manager, Energy Resource Development  
Snohomish County PUD  
(425) 783-1825  
[cwcollar@snopud.com](mailto:cwcollar@snopud.com)

1.5

## EXHIBIT A ENERGY STORAGE SYSTEM (ESS) PROJECT FLEXIBILITY ANALYSIS AND MODELING (FAM) PROJECT SCOPE OF WORK

### OVERVIEW

Consultant will lead the District's efforts to field test, analyze and formulate strategies for managing electrical energy system flexibility and related resources, via the following activities:

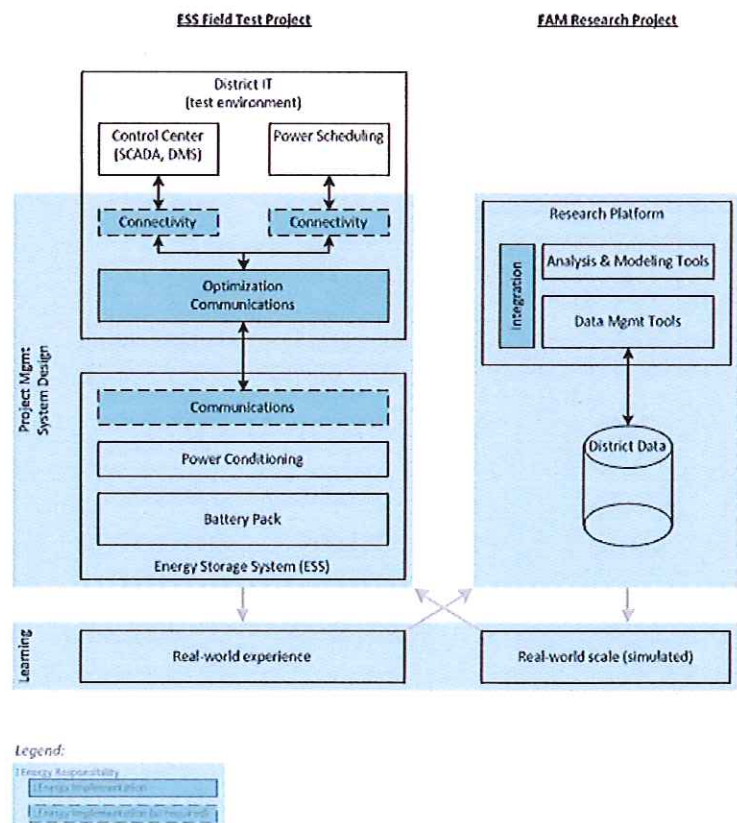
- **Energy Storage System (ESS) field test project** – Consultant will lead District's investigation and field testing of a substation-scale energy storage system, in conjunction with Alstom Grid, EPRI and other commercial partners TBD. Consultant services will include project management, system design, software development and partner management.
- **Flexibility Analysis and Modeling (FAM) research project** – Consultant will lead District's analysis and modeling of power supply and demand, in conjunction with University of Washington and other partners TBD. Consultant services will include project management, system design, analysis, modeling and partner management.

The diagram depicts primary components and outcomes of both projects.

Consultant responsibilities are shaded light blue. These include project management, partner management, system design and system integration across all project components, whether implemented by Consultant or others. For example, implementing the ESS system requires interoperable components from multiple project partners (battery pack, power conditioning system, etc.). Consultant is responsible for ensuring successful integration across these components.

Components which Consultant will directly implement (via software development) are shaded dark blue. These include optimization and communications software in ESS project; and integration software in FAM project.

Components which Consultant may directly implement (TBD), are shaded dark blue with dotted line border. Depending on





1.5

project requirements and partner capability, Consultant may implement software for communications within the ESS system, and software for connecting the ESS with District SCADA, DMS and power scheduling systems.

Primary project outcomes are learning:

- ESS project aims to gain real-world experience implementing an energy storage system. The project is necessarily limited in scale by expense of the ESS device and complexity of implementation (siting, protection, interconnection, etc.).
- FAM project aims to analyze and model variability and flexibility resources in the District power distribution system, to simulate real-world conditions at scales which cannot be achieved in ESS project due to limitations noted above.

It is expected that real-world experience gained in ESS project will inform and improve FAM project, and that analysis and modeling insights gained in FAM project will inform and improve ESS project (crossed gray arrows in diagram).

#### POTENTIAL BPA FUNDING

If the District receives BPA funding for the FAM project under its recent proposal, Consultant will assist the District in negotiating BPA contract and will be the District's primary technical interface to BPA.

#### SCHEDULE AND STAGE GATES

A schedule of tasks, sub-tasks and stage gates is depicted in the GANTT chart at the end of this document. The table following the GANTT chart contains person-hour and cost estimates, by task. Total costs for work performed hereunder are subject to the Contract maximum specified in section V, above.

Stage gates are included to determine whether / how to proceed based upon progress to date:

- **ESS stage gate:** Upon completion of the System Design task (expected in February 2012), the District, Consultant and project partners will determine whether to proceed with implementation of ESS field test.
- **FAM stage gate:** Upon completion of the Test Run task (expected in June 2012), the District, Consultant and project partners will determine whether to proceed with Full Run of modeling and analysis.
- **Quarterly stage gates:** Beginning in September 2012, District and Consultant will conduct quarterly stage gate meetings to ensure that work performed hereunder is continuing to meet District expectations.

As reflected in the GANTT chart, work on ESS and FAM projects will proceed in parallel (to the degree feasible), enabling discoveries in each project to inform the other as appropriate.

Work performed hereunder will commence on or about September 1, 2011.

District and Consultant hereby agree to this Scope of Work as representing a reasonable expectation of work for this agreement based on current assumptions.

1.5

Project phases are described in the following sections. As noted, work on ESS and FAM projects will proceed in parallel; hence, each phase includes both ESS and FAM tasks..

Contract tasks are numbered sequentially and indexed to ESS project, FAM project, or both. Contract tasks are also indexed to GANTT chart task IDs.

## **PHASE 1 – Project Definition; Partnerships**

Phase 1 establishes detailed definitions and key partnerships for EES and FAM projects. Tasks are as follows:

### **TASK 1: ESS DETAILED PROJECT DEFINITION**

[ESS: GANTT 2-4]

Work with District and project partners to establish objectives, key questions and field test strategy for substation-scale energy storage system (approximately 1MW, 2MWh). Determine how key information systems, such as control center and power scheduling, must be adapted or upgraded to interact with the ESS.

### **TASK 2: ESTABLISH ESS PARTNERSHIPS**

[ESS: GANTT 5-8]

Establish key partnerships with technology suppliers, ensuring compatibility with District and each other: control center software (Alstom Grid), battery supplier, power conditioning, ESS integrator. Assess potential partners, select partners, structure and sign partner agreements.

### **TASK 3: MANAGE EPRI ENGAGEMENT**

[ESS: GANTT 9-11]

Establish District as a leading utility contributor in EPRI Substation Li-ion Project. Lead District efforts to host an EPRI demo system (ESS). Drive development of communications / software integration spec for EPRI Project.

### **TASK 4: FAM DETAILED PROJECT DEFINITION**

[FAM: GANTT 25-28]

Work with District and project partners to establish objectives and key questions, and identify and gather District (and perhaps third-party) data sets required for FAM analysis project. Focus key questions on informing ESS project objectives: 1) characterize patterns of variability; 2) identify opportunities for better management of varying loads and generation; and, 3) determine how key information systems, such as control center and scheduling, must be adapted or upgraded to manage the identified variability and emerging flexibility resources.

### **TASK 5: MANAGE UW ENGAGEMENT**

[FAM: GANTT 23-24]

Establish deliverables required from UW. Structure and sign UW contract.

Required UW deliverables will include assistance with implementation of software platform for flexible data management and development of power scheduling and control algorithms (see Tasks 7, 8 and 13, below).



1.5

#### **TASK 5A (IF APPLICABLE): MANAGE BPA ENGAGEMENT**

[FAM: GANTT 47-51]

If the District receives funding from BPA under its recent proposal, Consultant will assist the District in negotiating BPA funding contract and will be the District's primary technical interface to BPA, including: structure and sign BPA contract; drive District participation in 2012 and 2013 BPA technology update conferences; write final project report for BPA.

### **PHASE 2 – System Design; Initial Modeling**

Phase 2 comprises ESS system design and FAM initial modeling and analysis. Tasks are as follows:

#### **TASK 6: ESS SYSTEM DESIGN**

[ESS: GANTT 12-16]

Consultant will drive the design and specification of the software and communications architecture for ESS. Consultant will manage technical interactions with ESS partners to ensure that overall system design is realized.

#### **TASK 7: IMPLEMENT FAM SOFTWARE ENVIRONMENT**

[FAM: GANTT 17-19]

Consultant will, in conjunction with UW, drive the assessment and selection of open-source data management tools; create the FAM software environment for modeling and analysis of flexibility resources; load District data sets identified in Task 4; and perform custom development as needed to adapt the software environment to District requirements.

#### **TASK 8: FAM TEST RUN**

[FAM: GANTT 34-40]

Consultant will, in conjunction with the District and UW, use the FAM software environment to conduct preliminary analysis and modeling of District power system operations using District data, with a focus on answering key questions established in Task 4. Tools and techniques employed in this task will include data visualization, pattern analysis and exploration of algorithms for managing variability. This task will lay the groundwork for full analysis and modeling in Task 13.

#### **TASK 9: ESS STAGE GATE**

[ESS: GANTT 16]

Upon completion of the ESS System Design task (expected in February 2012), the District, Consultant and project partners will determine whether to proceed with implementation of ESS field test.

#### **TASK 10: FAM STAGE GATE**

[FAM: GANTT 40]

Upon completion of the FAM Test Run task (expected in June 2012), the District, Consultant and project partners will determine whether to proceed with Full Run of modeling and analysis.

### **PHASE 3 – Implementation**

Phase 3 comprises implementation of the ESS system and full FAM program. Tasks are as follows:

1.5

#### **TASK 11: IMPLEMENT ESS SOFTWARE AND COMMUNICATIONS**

[ESS: GANTT 17-19]

Implement 1 Energy components

Oversee partner component / interface development

#### **TASK 12: IMPLEMENT ESS HARDWARE**

[ESS: GANTT 20-21]

Oversee partner development

#### **TASK 13: FAM FULL MODELING AND ANALYSIS RUN**

[FAM: GANTT 41-46]

Consultant will, in conjunction with the District and UW, use the FAM software environment to conduct full analysis and modeling of District power system operations using District data, to answer all key questions established in Task 4. Tools and techniques employed in this task will include data visualization, pattern analysis and exploration of algorithms for managing variability.

Upon completion of the above, Consultant will document the full modeling and analysis program and organize results for use in Phase 4, below.

### **PHASE 4 – Design Operational Integration; Report Results**

Phase 4 comprises design and planning for operational integration of flexibility resources (including energy storage), based upon learning from earlier phases, and reporting of project results to the District (and BPA, if applicable). Tasks are as follows:

#### **TASK 14: DESIGN OPERATIONAL INTEGRATION OF PROJECT FINDINGS**

[ESS, FAM: GANTT 45-46, 52-55]

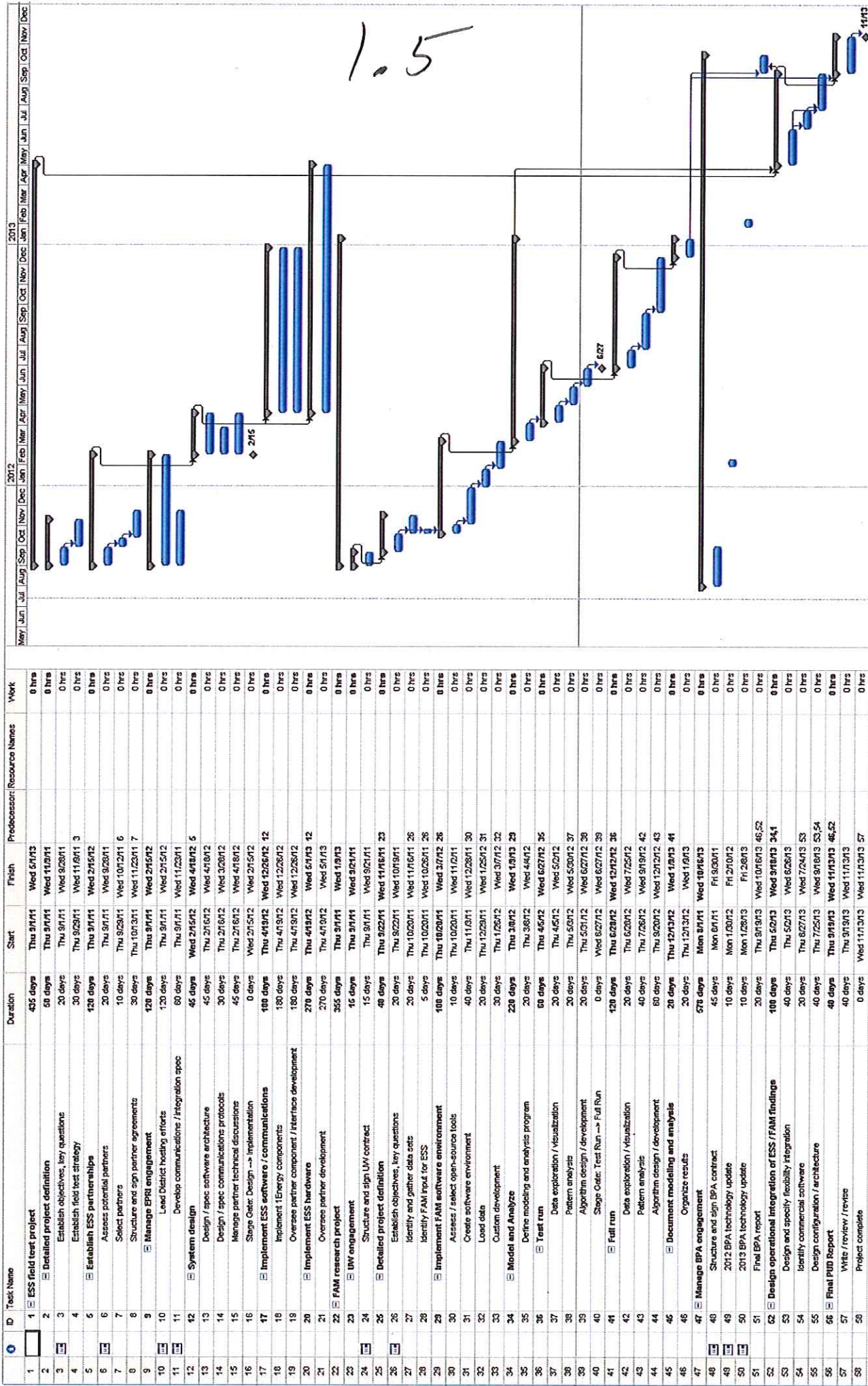
Consultant will, in conjunction with the District and project partners, drive design and specification of tools and techniques for integrating flexibility resources, including energy storage, into District operations. Sub-tasks include design of configuration and architecture for incorporating flexibility tools in District systems and, if applicable, identifying commercial software to meet District requirements.

#### **TASK 15: WRITE FINAL PROJECT REPORTS**

[ESS, FAM: GANTT 51, 56-58]

Consultant will, with input from the District and project partners, write the final project reports for ESS and FAM projects, including driving data gathering, review and revisions across all parties as required.

# GANTT Chart





# Task Estimates

| ID          | Task Name  | Duration | Start     | Finish    | Pred. | Allocation |     |     |     | Hours |    |    |    | Lead |     |     |      | SWE |             |           |           |           |           |
|-------------|--|----------|-----------|-----------|-------|------------|-----|-----|-----|-------|----|----|----|------|-----|-----|------|-----|-------------|-----------|-----------|-----------|-----------|
|             |  |          |           |           |       | Lead       | SI  | PM  | SW  | SW    | SW | SW | SW | SW   | SW  | SW  | SW   | SW  | SW          | SW        | SW        |           |           |
| 1           | ESS field test project                               | 435      | 01-Sep-11 | 01-May-13 |       |            |     |     |     |       |    |    |    |      |     |     |      |     |             | \$230     | \$173     | \$175     | \$125     |
| 2           | Detailed project definition                          | 83       | 01-Sep-11 | 26-Dec-11 |       |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 3           | Establish objectives, key questions                  | 30       | 01-Sep-11 | 28-Sep-11 |       | 15%        | 30% | 5%  |     |       |    |    |    | 24   | 48  | 8   | 0    |     |             | \$6,000   | \$9,400   | \$1,400   | \$0       |
| 4           | Establish field test strategy                        | 30       | 29-Sep-11 | 19-Nov-11 | 3     | 15%        | 30% | 5%  |     |       |    |    |    | 36   | 72  | 12  | 0    |     |             | \$9,000   | \$12,600  | \$2,100   | \$0       |
| 5           | Establish ESS partnerships                           | 120      | 01-Sep-11 | 15-Feb-12 |       |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 6           | Assess potential partners                            | 20       | 01-Sep-11 | 28-Sep-11 |       | 20%        | 15% | 10% |     |       |    |    |    | 32   | 24  | 16  | 0    |     |             | \$9,000   | \$4,200   | \$2,800   | \$0       |
| 7           | Select partners                                      | 10       | 29-Sep-11 | 12-Oct-11 | 6     | 25%        | 15% | 10% |     |       |    |    |    | 20   | 12  | 8   | 0    |     |             | \$5,000   | \$2,100   | \$1,400   | \$0       |
| 8           | Structure and sign partner agreements                | 30       | 13-Oct-11 | 23-Nov-11 | 7     | 25%        | 15% | 10% |     |       |    |    |    | 60   | 12  | 0   | 0    |     |             | \$15,000  | \$2,100   | \$0       | \$0       |
| 9           | Manage EPRI engagement                               | 120      | 01-Sep-11 | 15-Feb-12 |       |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 10          | Lead District hosting efforts                        | 120      | 01-Sep-11 | 15-Feb-12 |       | 5%         | 5%  |     |     |       |    |    |    | 48   | 48  | 0   | 0    |     |             | \$12,000  | \$9,400   | \$0       | \$0       |
| 11          | Develop communications / integration spec            | 60       | 01-Sep-11 | 23-Nov-11 |       | 5%         | 20% | 10% |     |       |    |    |    | 24   | 96  | 48  | 0    |     |             | \$6,000   | \$16,800  | \$8,400   | \$0       |
| 12          | System design  | 45       | 15-Feb-12 | 18-Apr-12 | 5     |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 13          | Design / spec software architecture                  | 45       | 16-Feb-12 | 18-Apr-12 |       | 20%        | 30% | 50% |     |       |    |    |    | 72   | 108 | 180 | 0    |     |             | \$18,000  | \$16,800  | \$31,500  | \$0       |
| 14          | Design / spec communications protocols               | 30       | 16-Feb-12 | 28-Mar-12 |       | 20%        | 30% | 50% |     |       |    |    |    | 48   | 72  | 120 | 0    |     |             | \$12,000  | \$12,600  | \$21,000  | \$0       |
| 15          | Manage partner technical discussions                 | 45       | 16-Feb-12 | 18-Apr-12 |       | 10%        | 20% | 10% |     |       |    |    |    | 36   | 72  | 36  | 0    |     |             | \$9,000   | \$12,600  | \$6,300   | \$0       |
| 16          | Stage Gate: Design -> Implementation                 | 0        | 15-Feb-12 | 15-Feb-12 |       |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 17          | Implement ESS software / communications              | 180      | 19-Apr-12 | 26-Dec-12 | 12    |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 18          | Implement Energy components                          | 180      | 19-Apr-12 | 26-Dec-12 |       | 5%         | 50% | 75% |     |       |    |    |    | 0    | 72  | 720 | 1080 |     |             | \$0       | \$12,600  | \$126,000 | \$135,000 |
| 19          | Oversee partner component / interface development    | 180      | 19-Apr-12 | 26-Dec-12 |       | 5%         | 5%  | 5%  |     |       |    |    |    | 72   | 72  | 72  | 0    |     |             | \$18,000  | \$12,600  | \$12,600  | \$0       |
| 20          | Implement ESS hardware                               | 270      | 19-Apr-12 | 01-May-13 | 12    |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 21          | Oversee partner development                          | 270      | 19-Apr-12 | 01-May-13 |       | 2%         | 3%  | 1%  |     |       |    |    |    | 43   | 65  | 22  | 0    |     |             | \$10,800  | \$11,340  | \$3,780   | \$0       |
| 22          | FAM research project                                 | 355      | 01-Sep-11 | 09-Jan-13 |       |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 23          | UW engagement  | 15       | 01-Sep-11 | 21-Sep-11 |       | 5%         | 5%  | 5%  |     |       |    |    |    | 6    | 6   | 6   | 0    |     |             | \$1,500   | \$1,050   | \$1,050   | \$0       |
| 24          | Structure and sign UW contract                       | 15       | 01-Sep-11 | 21-Sep-11 |       |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 25          | Detailed project definition                          | 40       | 22-Sep-11 | 16-Nov-11 | 23    |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 26          | Establish objectives, key questions                  | 20       | 22-Sep-11 | 19-Oct-11 |       | 15%        | 30% | 5%  |     |       |    |    |    | 24   | 48  | 8   | 0    |     |             | \$8,000   | \$8,400   | \$1,400   | \$0       |
| 27          | Identify and gather data sets                        | 20       | 20-Oct-11 | 16-Nov-11 | 26    | 5%         | 10% | 20% |     |       |    |    |    | 8    | 16  | 32  | 0    |     |             | \$2,000   | \$2,800   | \$5,600   | \$0       |
| 28          | Identify FAM input for ESS                           | 5        | 20-Oct-11 | 26-Oct-11 | 26    | 5%         | 20% | 10% |     |       |    |    |    | 2    | 8   | 4   | 0    |     |             | \$500     | \$1,400   | \$700     | \$0       |
| 29          | Implement FAM software environment                   | 100      | 20-Oct-11 | 07-Mar-12 | 26    |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 30          | Assess / select open-source tools                    | 10       | 20-Oct-11 | 02-Nov-11 |       | 5%         | 5%  | 50% |     |       |    |    |    | 4    | 4   | 40  | 0    |     |             | \$1,000   | \$700     | \$7,000   | \$0       |
| 31          | Create software environment                          | 40       | 03-Nov-11 | 28-Dec-11 | 30    |            |     | 30% | 50% |       |    |    |    | 0    | 0   | 96  | 160  |     |             | \$0       | \$0       | \$16,800  | \$20,000  |
| 32          | Load data  | 20       | 29-Dec-11 | 25-Jan-12 | 31    |            |     | 10% | 50% |       |    |    |    | 0    | 0   | 16  | 80   |     |             | \$0       | \$0       | \$2,800   | \$10,000  |
| 33          | Custom development                                   | 30       | 26-Jan-12 | 07-Mar-12 | 32    |            |     | 25% | 50% |       |    |    |    | 0    | 0   | 60  | 120  |     |             | \$0       | \$0       | \$10,500  | \$15,000  |
| 34          | Model and Analyze                                    | 220      | 08-Mar-12 | 09-Jan-13 | 29    |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 35          | Define modeling and analysis program                 | 20       | 08-Mar-12 | 04-Apr-12 |       | 25%        | 15% | 15% |     |       |    |    |    | 40   | 24  | 24  | 0    |     |             | \$10,000  | \$4,200   | \$4,200   | \$0       |
| 36          | Test run   | 60       | 05-Apr-12 | 27-Jun-12 | 35    |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 37          | Data exploration / visualization                     | 20       | 05-Apr-12 | 02-May-12 |       | 10%        | 10% | 20% | 30% |       |    |    |    | 16   | 16  | 32  | 48   |     |             | \$4,000   | \$2,800   | \$5,600   | \$6,000   |
| 38          | Pattern analysis                                     | 20       | 03-May-12 | 30-May-12 | 37    | 10%        | 10% | 20% | 30% |       |    |    |    | 16   | 16  | 32  | 48   |     |             | \$4,000   | \$2,800   | \$5,600   | \$6,000   |
| 39          | Algorithm design / development                       | 20       | 31-May-12 | 27-Jun-12 | 38    | 10%        | 10% | 20% | 30% |       |    |    |    | 16   | 16  | 32  | 48   |     |             | \$4,000   | \$2,800   | \$5,600   | \$6,000   |
| 40          | Stage Gate: Test Run -> Full Run                     | 0        | 27-Jun-12 | 27-Jun-12 | 39    |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 41          | Full run   | 120      | 28-Jun-12 | 12-Dec-12 | 36    |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 42          | Data exploration / visualization                     | 20       | 28-Jun-12 | 25-Jul-12 |       | 10%        | 10% | 20% | 30% |       |    |    |    | 16   | 16  | 32  | 48   |     |             | \$4,000   | \$2,800   | \$5,600   | \$6,000   |
| 43          | Pattern analysis                                     | 40       | 26-Jul-12 | 19-Sep-12 | 42    | 10%        | 10% | 20% | 30% |       |    |    |    | 32   | 32  | 64  | 96   |     |             | \$8,000   | \$5,600   | \$11,200  | \$12,000  |
| 44          | Algorithm design / development                       | 60       | 20-Sep-12 | 12-Dec-12 | 43    | 10%        | 10% | 20% | 30% |       |    |    |    | 48   | 48  | 96  | 144  |     |             | \$12,000  | \$9,400   | \$16,800  | \$16,000  |
| 45          | Document modeling and analysis                       | 20       | 13-Dec-12 | 09-Jan-13 | 41    |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 46          | Organize results                                     | 20       | 13-Dec-12 | 09-Jan-13 |       | 15%        | 25% | 25% | 10% |       |    |    |    | 24   | 40  | 40  | 16   |     |             | \$6,000   | \$7,000   | \$7,000   | \$2,000   |
| 47          | Manage BPA engagement                                | 578      | 01-Aug-11 | 16-Oct-13 |       |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 48          | Structure and sign BPA contract                      | 45       | 01-Aug-11 | 30-Sep-11 |       | 25%        | 5%  | 5%  |     |       |    |    |    | 90   | 18  | 18  | 0    |     |             | \$22,500  | \$3,150   | \$3,150   | \$0       |
| 49          | 2012 BPA technology update                           | 10       | 30-Jan-12 | 10-Feb-12 |       | 50%        | 50% | 50% |     |       |    |    |    | 40   | 40  | 40  | 0    |     |             | \$10,000  | \$7,000   | \$7,000   | \$0       |
| 50          | 2013 BPA technology update                           | 10       | 28-Jan-13 | 08-Feb-13 |       | 50%        | 50% | 50% |     |       |    |    |    | 40   | 40  | 40  | 0    |     |             | \$10,000  | \$7,000   | \$7,000   | \$0       |
| 51          | Final BPA report                                     | 20       | 19-Sep-13 | 16-Oct-13 | 46,52 | 30%        | 30% | 30% |     |       |    |    |    | 48   | 48  | 48  | 0    |     |             | \$12,000  | \$9,400   | \$6,400   | \$0       |
| 52          | Design operational integration of ESS / FAM findings | 100      | 02-May-13 | 18-Sep-13 | 34,1  |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 53          | Design and specify flexibility integration           | 40       | 02-May-13 | 26-Jun-13 |       | 15%        | 15% | 15% |     |       |    |    |    | 48   | 48  | 48  | 0    |     |             | \$12,000  | \$9,400   | \$6,400   | \$0       |
| 54          | Identify commercial software                         | 20       | 27-Jun-13 | 24-Jul-13 | 53    | 5%         | 15% | 25% |     |       |    |    |    | 8    | 24  | 40  | 0    |     |             | \$2,000   | \$4,200   | \$7,600   | \$0       |
| 55          | Design configuration / architecture                  | 40       | 25-Jul-13 | 18-Sep-13 | 53,54 | 5%         | 10% | 40% |     |       |    |    |    | 16   | 32  | 128 | 0    |     |             | \$4,000   | \$5,600   | \$22,400  | \$0       |
| 56          | Final PUD Report                                     | 40       | 19-Sep-13 | 13-Nov-13 | 46,52 |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| 57          | Write / review / revise                              | 40       | 19-Sep-13 | 13-Nov-13 |       | 40%        | 40% | 40% |     |       |    |    |    | 128  | 128 | 128 | 0    |     |             | \$32,000  | \$22,400  | \$22,400  | \$0       |
| 58          | Project complete                                     | 0        | 13-Nov-13 | 13-Nov-13 | 57    |            |     |     |     |       |    |    |    |      |     |     |      |     |             |           |           |           |           |
| Total       |  |          |           |           |       |            |     |     |     |       |    |    |    |      |     |     |      |     | \$296,300   | \$292,140 | \$410,460 | \$236,000 |           |
| Grand total |  |          |           |           |       |            |     |     |     |       |    |    |    |      |     |     |      |     | \$1,194,920 |           |           |           |           |

1.5

1.6

---

**From:** Cornwell, Tania  
**Sent:** Wednesday, August 17, 2011 1:53 PM  
**To:** Barnes, Janet  
**Subject:** FW: David Kaplan  
**Attachments:** STANDARD Boilerplate (Rev. 2 8 11)-1\_1Energy\_2011-08-01.docx; SOW\_1Energy.docx  
**Importance:** High

Hi Jan,

I'm glad I looked at this today. I sent it over to legal and was going to send your way after they reviewed, but since you will be out I'm sending to you now. This contract is for 800k and SOW is attached. They want to delete the Professional Liability.

---

**From:** Cornwell, Tania  
**Sent:** Wednesday, August 03, 2011 9:45 AM  
**To:** Spangler, Anne  
**Cc:** Waterman, Susan  
**Subject:** David Kaplan  
**Importance:** High

Hi Anne,

I just received this contract request and modified boilerplate from Craig Collar's group. They are hoping to get on the August 16<sup>th</sup> commission agenda, which means my deadline is Friday to submit to Judy. Jessica Spahr said you and Risk have already been involved in talks with this consultant, and she believed this boilerplate had already been approved. If you have approved, may I have the boilerplate initialed in the footer indicating so? If you have not reviewed and don't believe it can be returned by Friday, please let me know and I will suggest the Temporary Notice again.

Thanks!

---

**From:** Spahr, Jessica  
**Sent:** Wednesday, August 03, 2011 8:34 AM  
**To:** Cornwell, Tania  
**Subject:** 1Energy PSC

Hi Tania,

I started a contract requisition (req. 190714) for 1Energy Systems, for Craig Collar. David Kaplan from 1Energy has made some markups to the boilerplate discussed below. Do you see any problem getting this to the commission for the August 16 date? Craig has submitted the competitive waiver justification to Dana Toulson but I don't think we have her approval yet – should be soon. I also didn't fill in the accounting portion of the requisition yet as I still have to confirm the accounting numbers, but I wanted to make you aware of it as there has already been internal discussion with Steve Klein and legal as you can see below.

Thanks,

*Jessica Spahr*

**From:** Collar, Craig  
**Sent:** Monday, August 01, 2011 12:35 PM  
**To:** Spahr, Jessica  
**Subject:** FW: finalizing PSC

Here are the Energy Storage documents....if you can get started with Tania I will get the competitive waiver justification together...thanks,

**Craig W. Collar, P.E.**

*Senior Manager, Energy Resource Development*  
*Snohomish PUD*  
*2320 California Street*  
*Everett, WA 98206*  
*425-783-1825*  
[cwcollar@snopud.com](mailto:cwcollar@snopud.com)

---

**From:** David Kaplan [<mailto:davek@1energysystems.com>]  
**Sent:** Sunday, July 31, 2011 7:32 PM  
**To:** Collar, Craig; Spangler, Anne  
**Cc:** Toulson, Dana; Klein, Steve  
**Subject:** finalizing PSC

Craig and Anne, attached is markup of PSC boilerplate reflecting my atty's comments and mine. I've also attached latest SOW, discussed and finalized at our 7/18 mtg (Craig, Dana, Steve and me).

A few specific issues to note:

- Boilerplate markup reflects:

- 1) (Article IX) - Division of I/P rights, patterned after our discussions last fall (I used Anne's proposed language).
- 2) (Article IV) - Discount ability we discussed on 7/18, allows 1Energy to reduce cumulative billings as needed to keep in proportion to contract maximum. Also, late charges on delayed payments.
- 3) (Article VIII) - Remove requirement for errors & omissions insurance (per my agent this would increase my insurance cost 8-10x). Since this is an R&D project, I'm hoping this is OK.
- 4) (Article XI) - Make indemnity symmetric.

Regarding timing, we should aim for Aug 22 contract start, to support Aug 31 project kickoff mtg in Everett (already scheduled with Alstom, AV, S&C).

Please advise if this is feasible (requires Aug 16 Commission approval?) and next steps.

Thanks,  
Dave

David Kaplan  
1Energy Systems, Inc.  
[davek@1energysystems.com](mailto:davek@1energysystems.com)  
206.919.0206



1.7

---

**From:** Spangler, Anne  
**Sent:** Thursday, August 18, 2011 2:02 PM  
**To:** Cornwell, Tania; Collar, Craig  
**Cc:** Waterman, Susan  
**Subject:** FW: David Kaplan  
**Attachments:** STANDARD Boilerplate (Rev. 2 8 11)-1\_1Energy\_2011-08-01.docx; SOW\_1Energy.docx  
  
**Importance:** High

Hello Tania and Craig:

I have only made a few comments on these two documents, for clarity. I changed the interest rate on overdue payments from 1.5 to 1% per RCW 19.52.020 (setting a maximum of 12% annually, or 1% monthly) in the boilerplate, added my initials to the footer, and removed the "exhibit B" from the first page.

On the scope of work, I changed the references to BPA to Granting agency, as I understand we did not get awarded the BPA grant, but who knows whether we might apply for additional funding. I also added the word "mutually" where the PUD, 1Energy and the partners will "determine" to move to the next stage.

The question I have for Craig is whether the tasks identified sufficiently identify what you expect in terms of deliverables from those tasks. On my review, there do seem to be specific products anticipated from most of the tasks, which I think can suffice as a list of deliverables, but only you will know whether the task descriptions have enough meat that you could determine whether they are being met or not on an objective basis.

Please let me know whether you need anything else.

**Anne L. Spangler**, General Counsel  
*Snohomish County Public Utility District No. 1*  
(425) 783-8688

---

**From:** Cornwell, Tania  
**Sent:** Wednesday, August 17, 2011 2:26 PM  
**To:** Spangler, Anne  
**Cc:** Waterman, Susan  
**Subject:** FW: David Kaplan  
**Importance:** High

Hi Anne,

I was just looking at my calendar and realized that next week is my deadline for the September 6<sup>th</sup> commission meeting. I was wondering if you had a chance to review the modifications yet?

---

**From:** Cornwell, Tania  
**Sent:** Wednesday, August 03, 2011 9:45 AM  
**To:** Spangler, Anne  
**Cc:** Waterman, Susan

**Subject:** David Kaplan  
**Importance:** High

1.7

Hi Anne,

I just received this contract request and modified boilerplate from Craig Collar's group. They are hoping to get on the August 16<sup>th</sup> commission agenda, which means my deadline is Friday to submit to Judy. Jessica Spahr said you and Risk have already been involved in talks with this consultant, and she believed this boilerplate had already been approved. If you have approved, may I have the boilerplate initialed in the footer indicating so? If you have not reviewed and don't believe it can be returned by Friday, please let me know and I will suggest the Temporary Notice again.

Thanks!

---

**From:** Spahr, Jessica  
**Sent:** Wednesday, August 03, 2011 8:34 AM  
**To:** Cornwell, Tania  
**Subject:** 1Energy PSC

Hi Tania,

I started a contract requisition (req. 190714) for 1Energy Systems, for Craig Collar. David Kaplan from 1Energy has made some markups to the boilerplate discussed below. Do you see any problem getting this to the commission for the August 16 date? Craig has submitted the competitive waiver justification to Dana Toulson but I don't think we have her approval yet – should be soon. I also didn't fill in the accounting portion of the requisition yet as I still have to confirm the accounting numbers, but I wanted to make you aware of it as there has already been internal discussion with Steve Klein and legal as you can see below.

Thanks,

*Jessica Spahr*

---

**From:** Collar, Craig  
**Sent:** Monday, August 01, 2011 12:35 PM  
**To:** Spahr, Jessica  
**Subject:** FW: finalizing PSC

Here are the Energy Storage documents....if you can get started with Tania I will get the competitive waiver justification together...thanks,

**Craig W. Collar, P.E.**  
*Senior Manager, Energy Resource Development*  
*Snohomish PUD*  
*2320 California Street*  
*Everett, WA 98206*  
*425-783-1825*  
*cwcollar@snopud.com*

---

**From:** David Kaplan [mailto:davek@1energysystems.com]  
**Sent:** Sunday, July 31, 2011 7:32 PM  
**To:** Collar, Craig; Spangler, Anne  
**Cc:** Toulson, Dana; Klein, Steve  
**Subject:** finalizing PSC

Craig and Anne, attached is markup of PSC boilerplate reflecting my atty's comments and mine. I've also attached latest SOW, discussed and finalized at our 7/18 mtg (Craig, Dana, Steve and me).

A few specific issues to note:

1.7

- Boilerplate markup reflects:

- 1) (Article IX) - Division of I/P rights, patterned after our discussions last fall (I used Anne's proposed language).
- 2) (Article IV) - Discount ability we discussed on 7/18, allows 1Energy to reduce cumulative billings as needed to keep in proportion to contract maximum. Also, late charges on delayed payments.
- 3) (Article VIII) - Remove requirement for errors & omissions insurance (per my agent this would increase my insurance cost 8-10x). Since this is an R&D project, I'm hoping this is OK.
- 4) (Article XI) - Make indemnity symmetric.

Regarding timing, we should aim for Aug 22 contract start, to support Aug 31 project kickoff mtg in Everett (already scheduled with Alstom, AV, S&C).

Please advise if this is feasible (requires Aug 16 Commission approval?) and next steps.

Thanks,  
Dave

David Kaplan  
1Energy Systems, Inc.  
[davek@1energysystems.com](mailto:davek@1energysystems.com)  
206.919.0206



1.8

---

**From:** Cornwell, Tania  
**Sent:** Thursday, August 18, 2011 2:14 PM  
**To:** Barnes, Janet  
**Subject:** FW: David Kaplan  
**Attachments:** STANDARD Boilerplate (Rev. 2 8 11)-1\_1Energy\_2011-08-01.docx; SOW\_1Energy.docx  
**Importance:** High

Hi Jan,

Should I ask Anne about the Professional Liability?

---

**From:** Spangler, Anne  
**Sent:** Thursday, August 18, 2011 2:02 PM  
**To:** Cornwell, Tania; Collar, Craig  
**Cc:** Waterman, Susan  
**Subject:** FW: David Kaplan  
**Importance:** High

Hello Tania and Craig:

I have only made a few comments on these two documents, for clarity. I changed the interest rate on overdue payments from 1.5 to 1% per RCW 19.52.020 (setting a maximum of 12% annually, or 1% monthly) in the boilerplate, added my initials to the footer, and removed the "exhibit B" from the first page.

On the scope of work, I changed the references to BPA to Granting agency, as I understand we did not get awarded the BPA grant, but who knows whether we might apply for additional funding. I also added the word "mutually" where the PUD, 1Energy and the partners will "determine" to move to the next stage.

The question I have for Craig is whether the tasks identified sufficiently identify what you expect in terms of deliverables from those tasks. On my review, there do seem to be specific products anticipated from most of the tasks, which I think can suffice as a list of deliverables, but only you will know whether the task descriptions have enough meat that you could determine whether they are being met or not on an objective basis.

Please let me know whether you need anything else.

**Anne L. Spangler**, General Counsel  
*Snohomish County Public Utility District No. 1*  
(425) 783-8688

---

**From:** Cornwell, Tania  
**Sent:** Wednesday, August 17, 2011 2:26 PM  
**To:** Spangler, Anne  
**Cc:** Waterman, Susan  
**Subject:** FW: David Kaplan  
**Importance:** High

Hi Anne,

1.8

I was just looking at my calendar and realized that next week is my deadline for the September 6<sup>th</sup> commission meeting. I was wondering if you had a chance to review the modifications yet?

---

**From:** Cornwell, Tania  
**Sent:** Wednesday, August 03, 2011 9:45 AM  
**To:** Spangler, Anne  
**Cc:** Waterman, Susan  
**Subject:** David Kaplan  
**Importance:** High

Hi Anne,

I just received this contract request and modified boilerplate from Craig Collar's group. They are hoping to get on the August 16<sup>th</sup> commission agenda, which means my deadline is Friday to submit to Judy. Jessica Spahr said you and Risk have already been involved in talks with this consultant, and she believed this boilerplate had already been approved. If you have approved, may I have the boilerplate initialed in the footer indicating so? If you have not reviewed and don't believe it can be returned by Friday, please let me know and I will suggest the Temporary Notice again.

Thanks!

---

**From:** Spahr, Jessica  
**Sent:** Wednesday, August 03, 2011 8:34 AM  
**To:** Cornwell, Tania  
**Subject:** 1Energy PSC

Hi Tania,

I started a contract requisition (req. 190714) for 1Energy Systems, for Craig Collar. David Kaplan from 1Energy has made some markups to the boilerplate discussed below. Do you see any problem getting this to the commission for the August 16 date? Craig has submitted the competitive waiver justification to Dana Toulson but I don't think we have her approval yet – should be soon. I also didn't fill in the accounting portion of the requisition yet as I still have to confirm the accounting numbers, but I wanted to make you aware of it as there has already been internal discussion with Steve Klein and legal as you can see below.

Thanks,

*Jessica Spahr*

---

**From:** Collar, Craig  
**Sent:** Monday, August 01, 2011 12:35 PM  
**To:** Spahr, Jessica  
**Subject:** FW: finalizing PSC

Here are the Energy Storage documents....if you can get started with Tania I will get the competitive waiver justification together...thanks,

**Craig W. Collar, P.E.**  
*Senior Manager, Energy Resource Development*  
*Snohomish PUD*  
*2320 California Street*

Everett, WA 98206  
425-783-1825  
[cwcollar@snopud.com](mailto:cwcollar@snopud.com)

1.8

**From:** David Kaplan [mailto:[davek@1energysystems.com](mailto:davek@1energysystems.com)]  
**Sent:** Sunday, July 31, 2011 7:32 PM  
**To:** Collar, Craig; Spangler, Anne  
**Cc:** Toulson, Dana; Klein, Steve  
**Subject:** finalizing PSC

Craig and Anne, attached is markup of PSC boilerplate reflecting my atty's comments and mine. I've also attached latest SOW, discussed and finalized at our 7/18 mtg (Craig, Dana, Steve and me).

A few specific issues to note:

- Boilerplate markup reflects:

- 1) (Article IX) - Division of I/P rights, patterned after our discussions last fall (I used Anne's proposed language).
- 2) (Article IV) - Discount ability we discussed on 7/18, allows 1Energy to reduce cumulative billings as needed to keep in proportion to contract maximum. Also, late charges on delayed payments.
- 3) (Article VIII) - Remove requirement for errors & omissions insurance (per my agent this would increase my insurance cost 8-10x). Since this is an R&D project, I'm hoping this is OK.
- 4) (Article XI) - Make indemnity symmetric.

Regarding timing, we should aim for Aug 22 contract start, to support Aug 31 project kickoff mtg in Everett (already scheduled with Alstom, AV, S&C).

Please advise if this is feasible (requires Aug 16 Commission approval?) and next steps.

Thanks,  
Dave

David Kaplan  
1Energy Systems, Inc.  
[davek@1energysystems.com](mailto:davek@1energysystems.com)  
206.919.0206



## I. DESCRIPTION

1 Energy Systems, Inc. ("CONSULTANT") will provide the DISTRICT with support for the **Energy Storage System Testing and Modeling Research Project** comprised of two primary components:

- **Energy Storage System (ESS) field test project** – System design, software development, partner management and project management services as required to conduct the Energy Storage System (ESS) field test project.  
Partners: Alstom Grid, EPRI, others TBD
- **Flexibility Analysis and Modeling (FAM) research project** – Analysis, modeling, partner management and project management services as required to conduct the Flexibility Analysis and Modeling (FAM) research project.  
Partners: University of Washington, others TBD

## II. SCOPE OF WORK

Refer to Attachment A:

### **Energy Storage System Testing and Modeling Research Project SCOPE OF WORK**

In the performance of the work described in Attachment A, and in the performance of any work described in an amended contract or scope of work, the CONSULTANT will likely have access to Critical Infrastructure Information as that term is used in the Contract, and shall protect such information in accordance with the provisions of Article XIV, paragraph D (Directive 99 is attached as Exhibit B). Any Critical Infrastructure Information provided to the CONSULTANT will be prominently labeled as such by the DISTRICT. The DISTRICT expects such Critical Infrastructure Information to include details related to, but not limited by, the District's substation, distribution infrastructure, and control systems.

## III. CONTRACT SCHEDULE

Work shall commence upon CONSULTANT's receipt of written "Notice to Proceed." The estimated completion date is November 2013.

## IV. LOCATIONS

The Energy Storage System Testing and Modeling Research Project will be conducted online and within Snohomish and King Counties, Washington.

**V. PAYMENT**

The CONSULTANT shall submit invoices detailing all hours worked by each employee of the CONSULTANT under this Contract per the rate schedules below and all expenses the DISTRICT has agreed to reimburse as shown below. All invoices shall be sent directly to the DISTRICT's Project Leader on a monthly basis.

The DISTRICT will pay the CONSULTANT for services performed in accordance with the terms and conditions of the Contract and pursuant to negotiated billing rates set in the following schedule. The DISTRICT's total cost for all work performed by the CONSULTANT under this contract, including reasonable and necessary reimbursable expenses to the extent authorized below, shall not exceed eight-hundred thousand and 00/100 dollars (\$800,000.00).

| Labor Category        | Hourly Rate |
|-----------------------|-------------|
| Project Leader        | \$250       |
| Sr. Program Manager   | \$175       |
| Sr. Software Engineer | \$175       |
| Software Engineer     | \$125       |

| Reimbursable Expenses                  | Rates                                  |
|--|--|
| Equipment Rental                       | Cost                                   |
| Local travel                           | \$0.555/mile (or current Federal rate) |
| Remote travel (airfare, lodging, etc.) | Cost                                   |
| Outside reproduction                   | Cost                                   |
| Transportation by public carrier       | Cost                                   |
| Outside services or subcontractors     | Cost + 10%                             |
| Materials and supplies                 | Cost                                   |

Reimbursable expenses associated with this contract are limited to those identified above.

**VI. DISTRICT PROJECT LEADER**

The DISTRICT's Project Leader for this project is:

Craig Collar  
Senior Manager, Energy Resource Development  
Snohomish County PUD  
(425) 783-1825  
[cwcollar@snopud.com](mailto:cwcollar@snopud.com)

## OVERVIEW

CONSULTANT will lead the DISTRICT's efforts to field test, analyze and formulate strategies for managing electrical energy system flexibility and related resources, via the following activities:

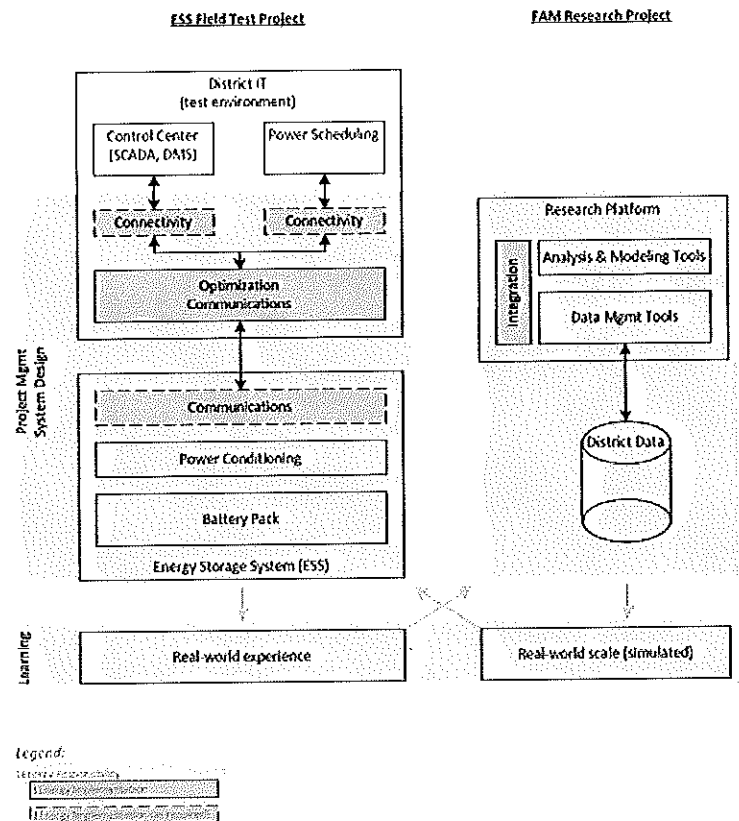
- **Energy Storage System (ESS) field test** – CONSULTANT will lead DISTRICT's investigation and field testing of a substation-scale energy storage system, in conjunction with Alstom Grid, EPRI and other commercial partners TBD. CONSULTANT services will include project management, system design, software development and partner management.
- **Flexibility Analysis and Modeling (FAM)** – CONSULTANT will lead DISTRICT's analysis and modeling of power supply and demand, in conjunction with University of Washington and other partners TBD. CONSULTANT services will include project management, system design, analysis, modeling and partner management.

The diagram depicts primary components and outcomes of both projects.

CONSULTANT responsibilities are shaded light blue. These include project management, partner management, system design and system integration across all project components, whether implemented by CONSULTANT or others. For example, implementing the ESS system requires interoperable components from multiple project partners (battery pack, power conditioning system, etc.). CONSULTANT is responsible for ensuring successful integration across these components.

Components which CONSULTANT will directly implement (via software development) are shaded dark blue. These include optimization and communications software in the ESS; and integration software in the FAM.

Components which CONSULTANT may directly implement (TBD), are shaded dark blue with dotted line border. Depending on project requirements and partner capability, CONSULTANT may implement software for communications within the ESS system, and software for connecting the ESS with DISTRICT SCADA, DMS and power scheduling systems.



Primary project outcomes are learning:

- The ESS aims to gain real-world experience implementing an energy storage system. The project is necessarily limited in scale by expense of the ESS device and complexity of implementation (siting, protection, interconnection, etc.).
- The FAM aims to analyze and model variability and flexibility resources in the DISTRICT power distribution system, to simulate real-world conditions at scales which cannot be achieved in ESS project due to limitations noted above.

It is expected that real-world experience gained in the ESS will inform and improve the FAM, and that analysis and modeling insights gained in the FAM will inform and improve the ESS (crossed gray arrows in diagram).

#### POTENTIAL GRANT FUNDING

If the DISTRICT receives grant funding for the FAM project, CONSULTANT will assist the DISTRICT in negotiating contracts with the granting agency and will be the DISTRICT's primary technical interface to the granting agency.

#### SCHEDULE AND STAGE GATES

A schedule of tasks, sub-tasks and stage gates is depicted in the GANTT chart at the end of this document. The table following the GANTT chart contains person-hour and cost estimates, by task. Total costs for work performed hereunder are subject to the Contract maximum specified in section V, above.

Stage gates are included to determine whether / how to proceed based upon progress to date:

- **ESS stage gate:** Upon completion of the System Design task (expected in February 2012), the DISTRICT, CONSULTANT and project partners will mutually determine whether to proceed with implementation of ESS field test.
- **FAM stage gate:** Upon completion of the Test Run task (expected in June 2012), the DISTRICT, CONSULTANT and project partners will mutually determine whether to proceed with Full Run of modeling and analysis.
- **Quarterly stage gates:** Beginning in September 2012, DISTRICT and CONSULTANT will conduct quarterly stage gate meetings to ensure that work performed hereunder is continuing to meet DISTRICT expectations.

As reflected in the GANTT chart, work on ESS and FAM projects will proceed in parallel (to the degree feasible), enabling discoveries in each project to inform the other as appropriate.

Work performed hereunder is estimated to commence on or about September 12, 2011.

DISTRICT and CONSULTANT hereby agree to this Scope of Work as representing a reasonable expectation of work for this agreement based on current assumptions.



Project phases are described in the following sections. As noted, work on ESS and FAM projects will proceed in parallel; hence, each phase includes both ESS and FAM tasks.

Contract tasks are numbered sequentially and indexed to ESS project, FAM project, or both. Contract tasks are also indexed to GANTT chart task IDs.

## **PHASE 1 – Project Definition; Partnerships**

Phase 1 establishes detailed definitions and key partnerships for EES and FAM projects. Tasks are as follows:

### **TASK 1: ESS DETAILED PROJECT DEFINITION**

[ESS: GANTT 2-4]

Work with DISTRICT and project partners to establish objectives, key questions and field test strategy for substation-scale energy storage system (approximately 1MW, 2MWh). Determine how key information systems, such as control center and power scheduling, must be adapted or upgraded to interact with the ESS.

### **TASK 2: ESTABLISH ESS PARTNERSHIPS**

[ESS: GANTT 5-8]

Establish key partnerships with technology suppliers, ensuring compatibility with DISTRICT and each other: control center software (Alstom Grid), battery supplier, power conditioning, ESS integrator. Assess potential partners, select partners, structure and sign partner agreements.

### **TASK 3: MANAGE EPRI ENGAGEMENT**

[ESS: GANTT 9-11]

Establish DISTRICT as a leading utility contributor in EPRI Substation Li-ion Project. Lead DISTRICT efforts to host an EPRI demo system (ESS). Drive development of communications / software integration spec for EPRI Project.

### **TASK 4: FAM DETAILED PROJECT DEFINITION**

[FAM: GANTT 25-28]

Work with DISTRICT and project partners to establish objectives and key questions, and identify and gather DISTRICT (and perhaps third-party) data sets required for FAM analysis project. Focus key questions on informing ESS project objectives: 1) characterize patterns of variability; 2) identify opportunities for better management of varying loads and generation; and, 3) determine how key information systems, such as control center and scheduling, must be adapted or upgraded to manage the identified variability and emerging flexibility resources.

### **TASK 5: MANAGE UW ENGAGEMENT**

[FAM: GANTT 23-24]

Establish deliverables required from UW. Structure and obtain execution of UW contract.

Required UW deliverables will include assistance with implementation of software platform for flexible data management and development of power scheduling and control algorithms (see Tasks 7, 8 and 13, below).

**TASK 5A (IF APPLICABLE): MANAGE GRANT ENGAGEMENT**

[FAM: GANTT 47-51]

If the DISTRICT receives grant funding, CONSULTANT will assist the DISTRICT in negotiating funding contracts and will be the DISTRICT's primary technical interface to the grant agency, including: structure and obtain execution of contracts; drive DISTRICT participation; write final project report for grant agency.

**PHASE 2 – System Design; Initial Modeling**

Phase 2 comprises ESS system design and FAM initial modeling and analysis. Tasks are as follows:

**TASK 6: ESS SYSTEM DESIGN**

[ESS: GANTT 12-16]

CONSULTANT will drive the design and specification of the software and communications architecture for ESS. CONSULTANT will manage technical interactions with ESS partners to ensure that overall system design is realized.

**TASK 7: IMPLEMENT FAM SOFTWARE ENVIRONMENT**

[FAM: GANTT 17-19]

CONSULTANT will, in conjunction with UW, drive the assessment and selection of open-source data management tools; create the FAM software environment for modeling and analysis of flexibility resources; load DISTRICT data sets identified in Task 4; and perform custom development as needed to adapt the software environment to DISTRICT requirements.

**TASK 8: FAM TEST RUN**

[FAM: GANTT 34-40]

CONSULTANT will, in conjunction with the DISTRICT and UW, use the FAM software environment to conduct preliminary analysis and modeling of DISTRICT power system operations using DISTRICT data, with a focus on answering key questions established in Task 4. Tools and techniques employed in this task will include data visualization, pattern analysis and exploration of algorithms for managing variability. This task will lay the groundwork for full analysis and modeling in Task 13.

**TASK 9: ESS STAGE GATE**

[ESS: GANTT 16]

Upon completion of the ESS System Design task (expected in February 2012), the DISTRICT, CONSULTANT and project partners will determine whether to proceed with implementation of ESS field test.

**TASK 10: FAM STAGE GATE**

[FAM: GANTT 40]

Upon completion of the FAM Test Run task (expected in June 2012), the DISTRICT, CONSULTANT and project partners will determine whether to proceed with Full Run of modeling and analysis.

**PHASE 3 – Implementation**

Phase 3 comprises implementation of the ESS system and full FAM program. Tasks are as follows:

**TASK 11: IMPLEMENT ESS SOFTWARE AND COMMUNICATIONS**

[ESS: GANTT 17-19]

Implement 1Energy components

Oversee partner component / interface development

**TASK 12: IMPLEMENT ESS HARDWARE**

[ESS: GANTT 20-21]

Oversee partner development

**TASK 13: FAM FULL MODELING AND ANALYSIS RUN**

[FAM: GANTT 41-46]

CONSULTANT will, in conjunction with the DISTRICT and UW, use the FAM software environment to conduct full analysis and modeling of DISTRICT power system operations using DISTRICT data, to answer all key questions established in Task 4. Tools and techniques employed in this task will include data visualization, pattern analysis and exploration of algorithms for managing variability.

Upon completion of the above, CONSULTANT will document the full modeling and analysis program and organize results for use in Phase 4, below.

**PHASE 4 – Design Operational Integration; Report Results**

Phase 4 comprises design and planning for operational integration of flexibility resources (including energy storage), based upon learning from earlier phases, and reporting of project results to the DISTRICT (and grant agency, if applicable). Tasks are as follows:

**TASK 14: DESIGN OPERATIONAL INTEGRATION OF PROJECT FINDINGS**

[ESS, FAM: GANTT 45-46, 52-55]

CONSULTANT will, in conjunction with the DISTRICT and project partners, drive design and specification of tools and techniques for integrating flexibility resources, including energy storage, into DISTRICT operations. Sub-tasks include design of configuration and architecture for incorporating flexibility tools in DISTRICT systems and, if applicable, identifying commercial software to meet DISTRICT requirements.

**TASK 15: WRITE FINAL PROJECT REPORTS**

[ESS, FAM: GANTT 51, 56-58]

CONSULTANT will, with input from the DISTRICT and project partners, write the final project reports for ESS and FAM projects, including driving data gathering, review and revisions across all parties as required.

1.10

---

**From:** Collar, Craig  
**Sent:** Friday, August 19, 2011 8:58 AM  
**To:** Cornwell, Tania  
**Subject:** SOW\_1Energy (2).docx



With my clarifying changes...



1.10

## **EXHIBIT A - SUMMARY**

Formatted: Centered

### **I. Description**

1Energy Systems, Inc. ("Consultant") will provide the District with support for the Energy Storage System Testing and Modeling Research Project comprised of two primary components:

Formatted: Font: Bold

- **Energy Storage System (ESS) field test project** – System design, software development, partner management and project management services as required to conduct the Energy Storage System (ESS) field test project.  
Partners: Alstom Grid, EPRI, others TBD
- **Flexibility Analysis and Modeling (FAM) research project** – Analysis, modeling, partner management and project management services as required to conduct the Flexibility Analysis and Modeling (FAM) research project.  
Partners: University of Washington, others TBD

### **II. Scope of Work**

Refer to attachment EXHIBIT A:

Energy Storage System Testing and Modeling Research Project ENERGY STORAGE SYSTEM (ESS) PROJECT  
FLEXIBILITY ANALYSIS AND MODELING (FAM) PROJECT  
SCOPE OF WORK

### **III. Contract Schedule**

Work shall commence upon Consultant's receipt of written "Notice to Proceed." The estimated completion date is November 2013.

### **IV. Locations**

The Energy Storage System Testing and Modeling Research Project ESS and FAM projects will be conducted online and within Snohomish and King Counties, Washington.

Formatted: Font: Not Bold

### **V. Payment**

The Consultant shall submit invoices detailing all hours worked by each employee of the Consultant under this Contract per the rate schedules below and all expenses the District has agreed to reimburse as shown below. All invoices shall be sent directly to the District's Project Leader on a monthly basis.

The District will pay the Consultant for services performed in accordance with the terms and conditions of the Contract and pursuant to negotiated billing rates set in the following schedule. The District's total cost for all work performed by the Consultant under this contract, including reasonable and necessary reimbursable expenses to the extent authorized below, shall not exceed eight-hundred thousand and 00/100 dollars (\$800,000.00).

| LABOR CATEGORY | HOURLY RATE |
|----------------|-------------|
| Project Leader | \$250       |

1.10

|                       |       |
|-----------------------|-------|
| Sr. Program Manager   | \$175 |
| Sr. Software Engineer | \$175 |
| Software Engineer     | \$125 |

| Reimbursable Expenses                  | Rates                                  |
|--|--|
| Equipment Rental                       | Cost                                   |
| Local travel                           | \$0.555/mile (or current Federal rate) |
| Remote travel (airfare, lodging, etc.) | Cost                                   |
| Outside reproduction                   | Cost                                   |
| Transportation by public carrier       | Cost                                   |
| Outside services or subcontractors     | Cost + 10%                             |
| Materials and supplies                 | Cost                                   |

Reimbursable expenses associated with this contract are limited to those identified above.

#### **VI. District Project Leader**

The District's Project Leader for this project is:

Craig Collar  
Senior Manager, Energy Resource Development  
Snohomish County PUD  
(425) 783-1825  
[cwcollar@snopud.com](mailto:cwcollar@snopud.com)



1.10

## EXHIBIT A

### Energy Storage System Testing and Modeling Research Project ENERGY STORAGE SYSTEM (ESS) PROJECT FLEXIBILITY ANALYSIS AND MODELING (FAM) PROJECT SCOPE OF WORK

Formatted: Font: 12 pt

#### OVERVIEW

Consultant will lead the District's efforts to field test, analyze and formulate strategies for managing electrical energy system flexibility and related resources, via the following activities:

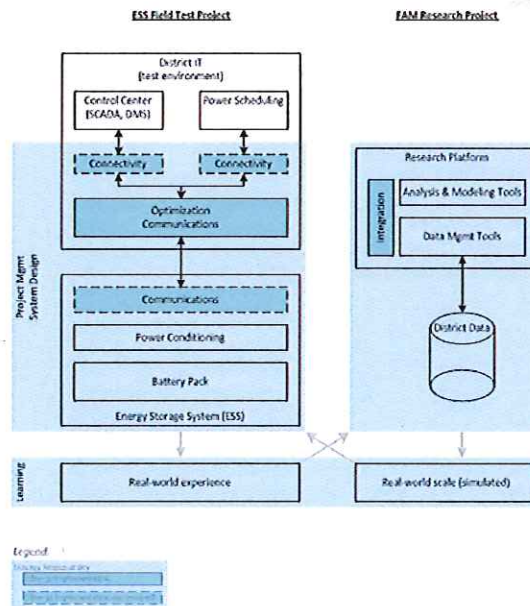
- **Energy Storage System (ESS) field test project** – Consultant will lead District's investigation and field testing of a substation-scale energy storage system, in conjunction with Alstom Grid, EPRI and other commercial partners TBD. Consultant services will include project management, system design, software development and partner management.
- **Flexibility Analysis and Modeling (FAM) research project** – Consultant will lead District's analysis and modeling of power supply and demand, in conjunction with University of Washington and other partners TBD. Consultant services will include project management, system design, analysis, modeling and partner management.

The diagram depicts primary components and outcomes of both projects.

Consultant responsibilities are shaded light blue. These include project management, partner management, system design and system integration across all project components, whether implemented by Consultant or others. For example, implementing the ESS system requires interoperable components from multiple project partners (battery pack, power conditioning system, etc.). Consultant is responsible for ensuring successful integration across these components.

Components which Consultant will directly implement (via software development) are shaded dark blue. These include optimization and communications software in the ESS project; and integration software in the FAM project.

Components which Consultant may directly implement (TBD), are shaded dark blue



1.10

with dotted line border. Depending on project requirements and partner capability, Consultant may implement software for communications within the ESS system, and software for connecting the ESS with District SCADA, DMS and power scheduling systems.

Primary project outcomes are learning:

- ~~ESS project~~The ESS aims to gain real-world experience implementing an energy storage system. The project is necessarily limited in scale by expense of the ESS device and complexity of implementation (siting, protection, interconnection, etc.).
- ~~FAM project~~The FAM aims to analyze and model variability and flexibility resources in the District power distribution system, to simulate real-world conditions at scales which cannot be achieved in ESS project due to limitations noted above.

It is expected that real-world experience gained in ~~ESS project~~the ESS will inform and improve ~~the FAM project~~, and that analysis and modeling insights gained in ~~the FAM project~~ will inform and improve ~~ESS project~~the ESS (crossed gray arrows in diagram).

#### POTENTIAL ~~GRANT~~BPA FUNDING

If the District receives ~~grant~~BPA funding for the FAM project ~~under its recent proposal~~, Consultant will assist the District in negotiating ~~BPA contracts with the granting agency~~ and will be the District's primary technical interface to ~~the granting agency~~BPA.

#### SCHEDULE AND STAGE GATES

A schedule of tasks, sub-tasks and stage gates is depicted in the GANTT chart at the end of this document. The table following the GANTT chart contains person-hour and cost estimates, by task. Total costs for work performed hereunder are subject to the Contract maximum specified in section V, above.

Stage gates are included to determine whether / how to proceed based upon progress to date:

- **ESS stage gate:** Upon completion of the System Design task (expected in February 2012), the District, Consultant and project partners will mutually determine whether to proceed with implementation of ESS field test.
- **FAM stage gate:** Upon completion of the Test Run task (expected in June 2012), the District, Consultant and project partners will mutually determine whether to proceed with Full Run of modeling and analysis.
- **Quarterly stage gates:** Beginning in September 2012, District and Consultant will conduct quarterly stage gate meetings to ensure that work performed hereunder is continuing to meet District expectations.

As reflected in the GANTT chart, work on ESS and FAM projects will proceed in parallel (to the degree feasible), enabling discoveries in each project to inform the other as appropriate.

Work performed hereunder will commence on or about September 12, 2011.



1.10

District and Consultant hereby agree to this Scope of Work as representing a reasonable expectation of work for this agreement based on current assumptions.

1.10

Project phases are described in the following sections. As noted, work on ESS and FAM projects will proceed in parallel; hence, each phase includes both ESS and FAM tasks..

Contract tasks are numbered sequentially and indexed to ESS project, FAM project, or both. Contract tasks are also indexed to GANTT chart task IDs.

### **PHASE 1 – Project Definition: Partnerships**

Phase 1 establishes detailed definitions and key partnerships for EES and FAM projects. Tasks are as follows:

#### **TASK 1: ESS DETAILED PROJECT DEFINITION**

[ESS: GANTT 2-4]

Work with District and project partners to establish objectives, key questions and field test strategy for substation-scale energy storage system (approximately 1MW, 2MWh). Determine how key information systems, such as control center and power scheduling, must be adapted or upgraded to interact with the ESS.

#### **TASK 2: ESTABLISH ESS PARTNERSHIPS**

[ESS: GANTT 5-8]

Establish key partnerships with technology suppliers, ensuring compatibility with District and each other: control center software (Alstom Grid), battery supplier, power conditioning, ESS integrator. Assess potential partners, select partners, structure and sign partner agreements.

#### **TASK 3: MANAGE EPRI ENGAGEMENT**

[ESS: GANTT 9-11]

Establish District as a leading utility contributor in EPRI Substation Li-ion Project. Lead District efforts to host an EPRI demo system (ESS). Drive development of communications / software integration spec for EPRI Project.

#### **TASK 4: FAM DETAILED PROJECT DEFINITION**

[FAM: GANTT 25-28]

Work with District and project partners to establish objectives and key questions, and identify and gather District (and perhaps third-party) data sets required for FAM analysis project. Focus key questions on informing ESS project objectives: 1) characterize patterns of variability; 2) identify opportunities for better management of varying loads and generation; and, 3) determine how key information systems, such as control center and scheduling, must be adapted or upgraded to manage the identified variability and emerging flexibility resources.

#### **TASK 5: MANAGE UW ENGAGEMENT**

[FAM: GANTT 23-24]

Establish deliverables required from UW. Structure and obtain execution of sign UW contract.

Required UW deliverables will include assistance with implementation of software platform for flexible data management and development of power scheduling and control algorithms (see Tasks 7, 8 and 13, below).

1.10

#### **TASK 5A (IF APPLICABLE): MANAGE GRANTBPA ENGAGEMENT**

[FAM: GANTT 47-51]

If the District receives grant funding ~~from BPA under its recent proposal~~, Consultant will assist the District in negotiating BPA funding contracts and will be the District's primary technical interface to the grant agencyBPA, including: structure and obtain execution of signBPA contracts; drive District participation ~~in 2012 and 2013 BPA technology update conferences~~; write final project report for grant agencyBPA.

#### **PHASE 2 – System Design; Initial Modeling**

Phase 2 comprises ESS system design and FAM initial modeling and analysis. Tasks are as follows:

##### **TASK 6: ESS SYSTEM DESIGN**

[ESS: GANTT 12-16]

Consultant will drive the design and specification of the software and communications architecture for ESS. Consultant will manage technical interactions with ESS partners to ensure that overall system design is realized.

##### **TASK 7: IMPLEMENT FAM SOFTWARE ENVIRONMENT**

[FAM: GANTT 17-19]

Consultant will, in conjunction with UW, drive the assessment and selection of open-source data management tools; create the FAM software environment for modeling and analysis of flexibility resources; load District data sets identified in Task 4; and perform custom development as needed to adapt the software environment to District requirements.

##### **TASK 8: FAM TEST RUN**

[FAM: GANTT 34-40]

Consultant will, in conjunction with the District and UW, use the FAM software environment to conduct preliminary analysis and modeling of District power system operations using District data, with a focus on answering key questions established in Task 4. Tools and techniques employed in this task will include data visualization, pattern analysis and exploration of algorithms for managing variability. This task will lay the groundwork for full analysis and modeling in Task 13.

##### **TASK 9: ESS STAGE GATE**

[ESS: GANTT 16]

Upon completion of the ESS System Design task (expected in February 2012), the District, Consultant and project partners will determine whether to proceed with implementation of ESS field test.

##### **TASK 10: FAM STAGE GATE**

[FAM: GANTT 40]

Upon completion of the FAM Test Run task (expected in June 2012), the District, Consultant and project partners will determine whether to proceed with Full Run of modeling and analysis.



1.10

### **PHASE 3 – Implementation**

Phase 3 comprises implementation of the ESS system and full FAM program. Tasks are as follows:

#### **TASK 11: IMPLEMENT ESS SOFTWARE AND COMMUNICATIONS**

[ESS: GANTT 17-19]

Implement Energy components  
Oversee partner component / interface development

#### **TASK 12: IMPLEMENT ESS HARDWARE**

[ESS: GANTT 20-21]

Oversee partner development

#### **TASK 13: FAM FULL MODELING AND ANALYSIS RUN**

[FAM: GANTT 41-46]

Consultant will, in conjunction with the District and UW, use the FAM software environment to conduct full analysis and modeling of District power system operations using District data, to answer all key questions established in Task 4. Tools and techniques employed in this task will include data visualization, pattern analysis and exploration of algorithms for managing variability.

Upon completion of the above, Consultant will document the full modeling and analysis program and organize results for use in Phase 4, below.

### **PHASE 4 – Design Operational Integration; Report Results**

Phase 4 comprises design and planning for operational integration of flexibility resources (including energy storage), based upon learning from earlier phases, and reporting of project results to the District (and grant agency BPA, if applicable). Tasks are as follows:

#### **TASK 14: DESIGN OPERATIONAL INTEGRATION OF PROJECT FINDINGS**

[ESS, FAM: GANTT 45-46, 52-55]

Consultant will, in conjunction with the District and project partners, drive design and specification of tools and techniques for integrating flexibility resources, including energy storage, into District operations. Sub-tasks include design of configuration and architecture for incorporating flexibility tools in District systems and, if applicable, identifying commercial software to meet District requirements.

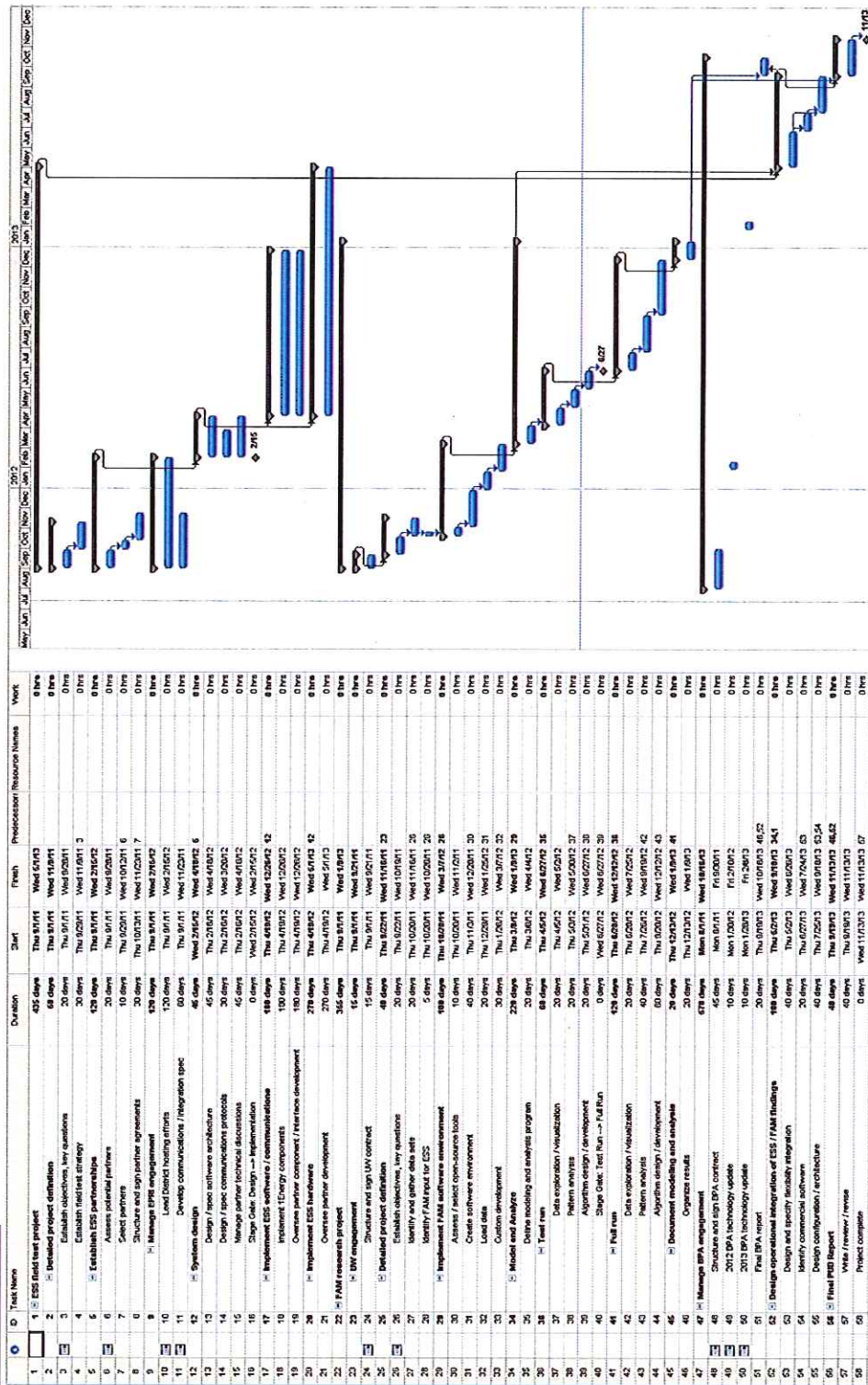
#### **TASK 15: WRITE FINAL PROJECT REPORTS**

[ESS, FAM: GANTT 51, 56-58]

Consultant will, with input from the District and project partners, write the final project reports for ESS and FAM projects, including driving data gathering, review and revisions across all parties as required.



## GANTT Chart



# Task Estimates

| ID          | Task Name  | Duration | Start     | Finish    | Allocation | Hours | Lead | \$72    | \$75    | \$75    |
|-------------|--|----------|-----------|-----------|------------|-------|------|---------|---------|---------|
| 1           | ESS field test project                               | 48       | 01-Sep-11 | 01-May-13 | 10%        | 24    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 2           | Detailed project definition                          | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 3           | Establish objectives, key questions                  | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 4           | Establish field test strategy                        | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 5           | Establish ESS partnerships                           | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 6           | Assess potential partners                            | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 7           | Select partners                                      | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 8           | Structure and sign partner agreements                | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 9           | Manage EPRI engagement                               | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 10          | Lead District testing efforts                        | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 11          | Develop communications / integration spec            | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 12          | System design  | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 13          | Design / spec software architecture                  | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 14          | Design / spec communications protocols               | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 15          | Manage partner technical discussions                 | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 16          | Shape Gate Design -> Implementation                  | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 17          | Implement ESS software / communications              | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 18          | Implement Energy components                          | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 19          | Onesoo partner component / interfaces development    | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 20          | Implement ESS hardware                               | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 21          | Onesoo partner development                           | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 22          | FAM research project                                 | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 23          | UV engagement  | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 24          | Structure and sign UV contract                       | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 25          | Detailed project definition                          | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 26          | Establish objectives, key questions                  | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 27          | Identify and gather data sets                        | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 28          | Identify FAM input for ESS                           | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 29          | Implement FAM software environment                   | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 30          | Assess / select open-source tools                    | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 31          | Onesoo software environment                          | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 32          | Load data  | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 33          | Custom development                                   | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 34          | Model and Analyze                                    | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 35          | Define modeling and analysis program                 | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 36          | Test run   | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 37          | Data exploration / visualization                     | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 38          | Pattern analysis                                     | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 39          | Algorithm design / development                       | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 40          | Shape Gate Test Run -> Full Run                      | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 41          | Full run   | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 42          | Data exploration / visualization                     | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 43          | Pattern analysis                                     | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 44          | Algorithm design / development                       | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 45          | Document modeling and analysis                       | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 46          | Organize results                                     | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 47          | Manage BPA engagement                                | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 48          | Structure and sign BPA contract                      | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 49          | 2012 BPA technology update                           | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 50          | 2013 BPA technology update                           | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 51          | Final BPA report                                     | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 52          | Design operational integration of ESS / FAM findings | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 53          | Design and specify flexibility integration           | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 54          | Identify commercial software                         | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 55          | Design configuration / architecture                  | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 56          | Final PUD Report                                     | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 57          | Write / review / review                              | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| 58          | Project complete                                     | 20       | 01-Sep-11 | 26-Dec-11 | 10%        | 20    | 0    | \$4,000 | \$4,000 | \$4,000 |
| Total       |  |          |           |           |            |       |      | \$1,000 | \$1,000 | \$1,000 |
| Grand total |  |          |           |           |            |       |      | \$1,000 | \$1,000 | \$1,000 |

1.10

1.11

---

**From:** Toulson, Dana  
**Sent:** Thursday, August 25, 2011 12:21 PM  
**To:** Cornwell, Tania  
**Cc:** Collar, Craig  
**Subject:** RE: ESS Award Recommendation(s) \$200000 And Over (3).docx

I'm sorry Tania,

I thought I had approved already.

I am okay with the write-up as is.

Thanks, Dana

Dana Toulson  
Assistant General Manager  
Power, Rates and Transmission Management  
Snohomish County PUD  
datoulson@snopud.com  
425 783-8022

---

**From:** Cornwell, Tania  
**Sent:** Thursday, August 25, 2011 9:03 AM  
**To:** Toulson, Dana  
**Cc:** Collar, Craig  
**Subject:** FW: ESS Award Recommendation(s) \$200000 And Over (3).docx

Hi Dana,

I am sorry to be bugging you again, but I have not received a response to my previous email. May I please have you review and approve if you are okay with the commission write-up? Thanks!

---

**From:** Cornwell, Tania  
**Sent:** Thursday, August 18, 2011 11:50 AM  
**To:** Toulson, Dana  
**Cc:** Collar, Craig  
**Subject:** ESS Award Recommendation(s) \$200000 And Over (3).docx

Dana,

May I have you review/approve the commission sheet?

<< File: ESS Award Recommendation(s) \$200000 And Over (3).docx >>

This contract is entered into by and between PUBLIC UTILITY DISTRICT NO. 1 OF SNOHOMISH COUNTY (hereinafter referred to as DISTRICT), located at 2320 California Ave., Everett, Washington, and 1Energy Systems, Inc. (hereinafter referred to as CONSULTANT), located at 610 W Prospect St, Seattle, WA, 98119.

The parties to this contract agree as follows:

#### **ARTICLE I - SCOPE OF SERVICES**

The CONSULTANT shall perform, or cause to be performed, the services generally described below and identified and defined as CONSULTANT responsibilities throughout this contract and which are more fully described in Exhibit A - Scope of Work, attached hereto and made a part hereof. Project Description: Energy Storage System (ESS) field test project and Flexibility Analysis and Modeling (FAM) research project.

#### **ARTICLE II - INDEPENDENT CONTRACTOR**

It is understood and mutually agreed upon by the parties that the CONSULTANT shall perform the services pursuant to this contract as an Independent Contractor and not as an agent or employee of the DISTRICT.

#### **ARTICLE III - NOTICE TO PROCEED AND TIME OF PERFORMANCE**

The term of this contract shall be September 12, 2011 through December 31, 2013. The CONSULTANT shall begin work in accordance with the DISTRICT'S Notice to Proceed. Any costs incurred by CONSULTANT prior to the Notice to Proceed shall not be reimbursed by the DISTRICT. The CONSULTANT shall complete all specified contract work, including submission of reports and other required documentation, within the schedules set forth in Exhibit A - Scope of Work. Any revision of such schedules shall be by mutual agreement, in writing, between the DISTRICT and the CONSULTANT.

#### **ARTICLE IV - COMPENSATION AND PAYMENT**

- A. The DISTRICT shall pay the CONSULTANT for services rendered as detailed in Exhibit A. However, there shall be no advance payment for services furnished pursuant to this contract.
- B. Payment made to the CONSULTANT shall not constitute acceptance of the work or any portion thereof which is not in accordance with this contract. The DISTRICT retains the right to pay only that portion of the total contract amount that is proportionate to the amount of work completed as compared to the total amount of work required to be performed under this contract.
- C. The DISTRICT'S total cost for all work performed by the CONSULTANT under this contract, including reasonable and necessary reimbursable expenses to the extent authorized in the Scope of Work, shall not exceed Eight Hundred Thousand and 00/100 dollars (\$800,000.00). Reasonable and necessary expenses shall be billed at actual cost (other than mileage and Per Diem rates as set forth below) and shall conform to the following criteria except to the extent specifically authorized in advance, in writing, by the DISTRICT:
  - 1. The mileage rate shall not exceed the current Internal Revenue Services (IRS) rates per mile as allowed for business related travel. Parking shall be the actual cost. When rental vehicles are authorized, government rates shall be requested and luxury or utility vehicles shall not be utilized; provided, however, that utility vehicles may be authorized if approved in advance, in writing, when reasonably required to perform the services described in the Scope of Work.



**ARTICLE IV - COMPENSATION AND PAYMENT (continued)**

2. Reimbursement for meals shall be limited to the Per Diem rates established by Federal travel requisitions for the host city in the code of Federal Regulations, 41 CFR Section 301 (M&IE).
  3. Lodging shall be in a hotel within a ten-mile radius of the work site except where no hotel is available within ten miles of the work site, in which case alternative lodging shall be approved in writing in advance by the DISTRICT.
  4. Air travel shall be by coach at the lowest available price.
  5. If authorized in the Scope of Work, costs including but not limited to telephone expenses, reproduction costs, photographing, telecopying, photocopying, printing, express delivery charges, commercial printing and binding, etc., shall be billed at actual cost. The following items are not allowable expenses: alcohol, entertainment, in-room minibar charges and valet parking. Laundry services are only reimbursable during stays of one week or more.
- D. The CONSULTANT shall provide the DISTRICT with invoices of all labor costs and copies of original, detailed receipts for all expenses incurred on the project for which reimbursement is authorized (with the exception of meal expenses, which shall be reimbursed at the Per Diem rates described in subsection C.2. above). Invoices must be provided no later than the end of the month following the month in which the services were provided. The CONSULTANT may, at CONSULTANT's sole option, discount all or any portion of an invoice provided to the DISTRICT.
- E. The DISTRICT shall pay the CONSULTANT within thirty (30) days after receipt and approval of the CONSULTANT'S invoices. Payments not made within such time period shall be subject to late charges equal to the lesser of (a) one and one-half percent (1%) per month of the overdue amount or (b) the maximum amount permitted under applicable law. The DISTRICT will reimburse the CONSULTANT for any costs or expenses (including, but not limited to, reasonable attorney fees) incurred by the CONSULTANT to collect any amount that is not paid by the DISTRICT when due. In the event an invoice remains unpaid forty-five (45) or more days from the invoice date, the CONSULTANT may, in its discretion, suspend providing work under the contract without any liability to the CONSULTANT until such invoice is paid in full.

**ARTICLE V - ASSIGNMENT AND SUBCONTRACTS**

This contract shall not be assigned by either party, either in whole or in part, without the prior written approval of the other. Any attempted assignment without such written consent shall be void.

- A. As required by the work and as approved in writing by the DISTRICT, the CONSULTANT may enter into contracts with other firms for services not normally performed by the CONSULTANT.
- B. Any subcontract entered into by the CONSULTANT subsequent to the execution of this contract must be approved in writing by the DISTRICT. This provision shall be included in all subcontracts with contractors and/or consultants with whom the CONSULTANT will acquire services.
- C. The CONSULTANT shall also include a provision in all subcontracts that, in the event the CONSULTANT'S services are terminated, the CONSULTANT or the DISTRICT shall have the right to terminate the subcontract for the CONSULTANT'S or the DISTRICT'S convenience, or assign the subcontract to the DISTRICT at the DISTRICT'S option.
- D. Any subcontracted services shall be billed to the DISTRICT at the CONSULTANT'S cost, except to the extent a markup on such costs is specifically authorized in the Scope of Work; provided that in no event will such markup exceed 10% of such costs.

**ARTICLE VI - CONTROL AND APPROVAL**

The CONSULTANT shall appoint a Project Manager who will be in charge of the project for the CONSULTANT and have authority to make binding decisions on behalf of the CONSULTANT. All notices regarding changes in the project or revisions to the Scope of Work shall be delivered to the designated Project Manager. The CONSULTANT'S Project Manager for this project will be:

Name: David Kaplan

Title: CEO

Email Address: davek@1energysystems.com

Mailing Address: 610 W Prospect St.

City, State, Zip: Seattle, WA 98119

Phone Number: 206.919.0206

Fax Number: \_\_\_\_\_

- A. The CONSULTANT shall not change or replace its Project Manager without the prior written approval of the DISTRICT.
- B. The DISTRICT shall have the right to review personnel assigned to perform the services required of the CONSULTANT and the right to require the CONSULTANT to replace any individual who, in the commercially reasonable opinion of the DISTRICT'S Project Leader, is unqualified or otherwise unfit to perform such services.
- C. The CONSULTANT shall proceed with due diligence upon the work necessary to satisfy the terms of this contract. The DISTRICT at all times shall have access to the work being performed by the CONSULTANT under this contract, including information regarding the progress of the work and other matters pertaining thereto.
- D. The DISTRICT'S Project Leader will be in charge of the project for the DISTRICT and have authority to make decisions on behalf of the DISTRICT. The DISTRICT'S Project Leader for this project will be:

Name: Craig Collar

Title: Sr. Mgr., Energy Resource Development

Email Address: cwcollar@snopud.com

Mailing Address: 2320 California Street

City, State, Zip: Everett, WA 98201

Phone Number: (425) 783-1825

Fax Number: \_\_\_\_\_

- E. The DISTRICT shall not change or replace its Project Leader without giving prior written notice to the CONSULTANT.

**ARTICLE VII – PUBLIC RECORDS AND AUDIT RIGHTS**

- A. The DISTRICT is subject to Washington's Public Records Act, Chapter 42.56 RCW (the "Act"), and the Act defines "public record" very broadly. Any records or documents, including electronic records, relating to or arising out of this contract are subject to that Act.

**ARTICLE VII – PUBLIC RECORDS AND AUDIT RIGHTS (continued)**

- B. Public Records, including this contract, may be required to be made available for inspection or copying if a request to do so is received by the DISTRICT. Any such request received by the CONSULTANT, including oral requests, must be referred to a DISTRICT Public Records Officer immediately so that the DISTRICT may acknowledge the request within five (5) business days of receipt. The CONSULTANT shall not make Public Records available to anyone requesting them unless authorized to do so by the DISTRICT.
- C. The CONSULTANT must retain all Public Records for a period of at least six years following completion of the Contract. As an alternative to retaining Public Records after the conclusion of the contract the CONSULTANT may deliver such Records to the DISTRICT in a format compatible with DISTRICT records retention and retrieval systems. At or following the conclusion of the six-year period, the CONSULTANT must notify the DISTRICT if it intends to destroy any Public Records, and provide the DISTRICT the option to retain such records in lieu of destruction.
- D. During this contract and for two years thereafter, the DISTRICT and its agents shall have the right to inspect and to perform audits of the CONSULTANT'S records pertaining to this contract.
- E. The CONSULTANT shall make records available as required by this Article without charge to the DISTRICT.

**ARTICLE VIII – INSURANCE**

- A. Prior to the commencement of any work under this contract, and at all times during the term of this contract, CONSULTANT shall obtain and maintain continuously, at its own expense a policy, or policies of insurance as enumerated below. All insurance required by this contract will be primary to any insurance carried by the DISTRICT. CONSULTANT shall have no right to call upon or seek contribution from any insurance carried by the DISTRICT or of its additional insured's.
- B. The CONSULTANT shall, during the term of this contract, comply with all applicable Worker's Compensation Statutes, and in the case of any work sublet, the CONSULTANT shall require the subconsultant similarly to comply with all Worker's Compensation Statutes. Prior to start of work, if applicable, the CONSULTANT and each of its subconsultants shall provide the DISTRICT with a Certificate of Coverage issued by the Department of Labor & Industries, State of Washington. If not insured through the State of Washington, CONSULTANT shall provide a Certificate of Insurance evidencing Workers Compensation coverage by a qualified insurer with minimum limits of \$1,000,000. The CONSULTANT shall also take out and maintain during the term of this contract, Employer's Liability Insurance and/or Washington Stop Gap Employer's Liability Insurance with a minimum limit of \$1,000,000 per accident and per employee disease with an insurance company authorized to write such insurance.
- C. The CONSULTANT shall keep in force during the contract period Commercial General Liability insurance written on an occurrence form which shall include the following: bodily injury, including wrongful death, property damage, including loss thereof, along with premises/operations liability, products/completed operations, personal/advertising injury, contractual liability, stop gap or employers contingent liability and fire damage legal liability with minimum acceptable limits of \$1,000,000 per occurrence. The Commercial General Liability policy shall not exclude: broad form contractual liability, broad form property damage including completed operations, XCU coverage or independent contractor's liability.

**ARTICLE VIII – INSURANCE (continued)**

- D. The CONSULTANT shall keep in force during the contract period Business Automobile Liability insurance including coverage for owned, non-owned, leased or hired vehicles used by or for CONSULTANT in any capacity in connection with carrying out this contract, written to include bodily injury, including wrongful death, and property damage, including loss of use thereof, with minimum acceptable limits of \$1,000,000 per occurrence.
- E. Such insurance in paragraphs D and E above, shall include the DISTRICT, its directors, officers, elected officials, employees and agents as additional insureds with respect to the DISTRICT'S liability arising out of or related to CONSULTANT'S negligence in the performance of services under this contract.
- F. The CONSULTANT shall furnish the DISTRICT with a certificate(s) and endorsement(s) showing evidence of insurance coverage as defined in paragraphs A, B, C, D and E above, or with other adequate evidence of such coverage which may be accepted by the DISTRICT, in its sole discretion, in lieu of such certificate. All policy coverage required under paragraphs C and D above shall be written on an occurrence basis. Insurance policies shall be obtained and maintained with companies rated A- or better by A.M. Best Co.'s Key Rating Guide. No policy may be canceled or materially altered by the insurance company without giving thirty (30) days prior written notice of cancellation, lapse or material alteration to the DISTRICT.
- G. Nothing contained in these insurance requirements shall be construed as limiting the extent of the CONSULTANT'S responsibility for payment of damages resulting from its operations under this contract.
- H. The CONSULTANT shall require and ensure that each of its subconsultants meets the insurance requirements and specifications of this contract. All coverages for subconsultants shall be subject to all of the requirements stated herein unless the DISTRICT determines in writing that specific types of coverage are inapplicable to a subconsultant's profession. The CONSULTANT shall require each of its subconsultants to furnish to the CONSULTANT a Certificate of Insurance showing evidence of such coverage.

**ARTICLE IX – WORK PRODUCT**

The CONSULTANT will retain exclusive rights to all "Work Product," including all intellectual property rights, the CONSULTANT develops in the course of its work, including, without limitation, documents, data, studies, surveys, drawings, maps, photographs and any object or source code for any software developed pursuant to or in connection with this contract, as well as any copyrights, patents, trade secrets, trademarks or other intellectual property developed for or in connection with this contract, provided, however, that 1) the DISTRICT will retain ownership of data related to its operations, and 2) the DISTRICT and CONSULTANT will retain joint ownership of use cases, functional specifications and findings developed in the course of CONSULTANT's work. CONSULTANT agrees that, at the conclusion of this contract, or at any time before or after that time, upon request of the DISTRICT, CONSULTANT shall confirm the rights set forth in this paragraph, which rights shall survive termination of this contract, and shall deliver to the DISTRICT all copies of the Work Product in its possession to which the DISTRICT retains ownership rights. Notwithstanding any other provision of this paragraph, CONSULTANT shall have the right to maintain copies of records as required by its record keeping or reporting responsibilities under applicable law provided CONSULTANT does not otherwise use or disclose such records.



**ARTICLE X – TERMINATION**

- A. The DISTRICT may terminate this contract at any time by giving the CONSULTANT 30 days' written notice of such termination. In such event, the CONSULTANT shall stop the performance of the CONSULTANT'S services hereunder except on work, mutually agreed upon in writing between the CONSULTANT and the DISTRICT, necessary to carry out such termination.
- B. In the event of termination, the DISTRICT shall pay to the CONSULTANT all contract costs incurred prior to termination and incurred in connection with mutually agreed upon work to carry out the termination. The CONSULTANT shall not be entitled to compensation for lost profit or expectations of profit due to the DISTRICT'S early termination of this contract. All payments shall comply with ARTICLE IV-B above.
- C. In the event of termination, the CONSULTANT shall provide the DISTRICT with all finished and unfinished Work Product prepared by the CONSULTANT under this contract to which the DISTRICT retains ownership rights. Such materials shall be the property of the DISTRICT, unless otherwise specified in ARTICLE IX above. Notwithstanding any other provision of this paragraph, CONSULTANT shall have the right to maintain copies of records as required by its record keeping responsibilities under applicable law.

**ARTICLE XI - INDEMNIFICATION, DISCLAIMER AND LIMITATIONS**

- A. The CONSULTANT hereby indemnifies and agrees to hold harmless and release the DISTRICT and its commissioners, officers, employees and agents and each of the heirs, personal representatives, successors and assigns of any of the foregoing from and against any and all liabilities, losses, claims, damages, costs, demands, fines, judgments, penalties, obligations and payments, together with any reasonable costs and expenses (including, without limitation, reasonable attorneys' fees and out-of-pocket expenses and reasonable costs and expenses of investigation) incurred in connection with any of the foregoing, to the extent they result from, relate to or arise out of or in connection with (i) any failure of the CONSULTANT (or anyone directly or indirectly employed by the CONSULTANT, including subconsultants of the CONSULTANT) duly to perform or observe any term, provision, covenant, agreement or condition hereunder to be performed or observed by or on behalf of the CONSULTANT or (ii) any negligence or intentional misconduct of the CONSULTANT (or anyone directly or indirectly employed by the CONSULTANT, including subconsultants of the CONSULTANT).
- B. Solely and expressly for purposes of its duties to indemnify and hold harmless the DISTRICT as set forth above, the CONSULTANT specifically waives any immunity it might have under the State Industrial Insurance law, Title 51 RCW, or any similar worker's compensation act, in the event that a claim is made against the DISTRICT for an injury to any employee of CONSULTANT. THE CONSULTANT ACKNOWLEDGES THAT THIS WAIVER HAS BEEN MUTUALLY NEGOTIATED BY THE PARTIES.
- C. The DISTRICT hereby indemnifies and agrees to hold harmless and release the CONSULTANT and its directors, officers, employees and agents and each of the heirs, personal representatives, successors and assigns of any of the foregoing from and against any and all liabilities, losses, claims, damages, costs, demands, fines, judgments, penalties, obligations and payments, together with any reasonable costs and expenses (including, without limitation, reasonable attorneys' fees and out-of-pocket expenses and reasonable costs and expenses of investigation) incurred in connection with any of the foregoing, to the extent they result from, relate to or arise out of or in connection with (i) any failure of the DISTRICT (or anyone directly or indirectly employed by the DISTRICT) duly to perform or observe any term, provision, covenant, agreement or condition hereunder to be performed or observed by or on behalf of the DISTRICT or (ii) any negligence or intentional misconduct of the DISTRICT (or anyone directly or indirectly employed by the DISTRICT).

**ARTICLE XI - INDEMNIFICATION, DISCLAIMER AND LIMITATIONS (continued)**

- D. **DISCLAIMER OF WARRANTIES.** EXCEPT AS OTHERWISE PROVIDED IN THIS CONTRACT, ALL WORK AND SERVICES PROVIDED BY THE CONSULTANT ARE PROVIDED "AS IS" AND WITHOUT ANY WARRANTY. THE CONSULTANT DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUALITY OF INFORMATION, TITLE AND NON-INFRINGEMENT.
- E. **LIMITATION OF LIABILITY AND DAMAGES.** THE CONSULTANT AND ITS DIRECTORS, OFFICERS, EMPLOYEES AND AGENTS SHALL HAVE NO LIABILITY TO THE DISTRICT FOR ANY LOSS OF PROFITS, SALES, BUSINESS, DATA OR OTHER INCIDENTAL, CONSEQUENTIAL OR SPECIAL LOSS OR DAMAGE OF ANY KIND OR NATURE, INCLUDING EXEMPLARY AND PUNITIVE DAMAGES, RESULTING FROM OR ARISING OUT OF THIS CONTRACT OR ANY SCOPE OF WORK OR OTHER ORDER FORM. THE TOTAL LIABILITY OF THE CONSULTANT AND ITS DIRECTORS, OFFICERS, EMPLOYEES AND AGENTS TO THE DISTRICT ARISING OUT OF THIS CONTRACT OR ANY SCOPE OF WORK OR OTHER ORDER FORM SHALL NOT EXCEED THE TOTAL FEES PAID TO THE CONSULTANT BY THE DISTRICT DURING THE SIX (6) MONTHS IMMEDIATELY PRECEDING THE EVENT GIVING RISE TO THE LIABILITY.

**ARTICLE XII - WASHINGTON RETIREMENT SYSTEMS RETIREES**

Has the CONSULTANT (company owner) retired from the State of Washington using the 2008 PERS Early Reduction Factors? Yes \_\_\_\_ or No X. If yes, the CONSULTANT must furnish the DISTRICT with the CONSULTANT'S name and social security number which will be furnished to the Washington Department of Retirement Systems.

**ARTICLE XIII - CHANGES AND EXTRA WORK**

The DISTRICT reserves the right to order and approve changes within the scope of the CONSULTANT'S services hereunder by a written Amendment executed by the parties, and no modification to this contract may be enforced against a party which has not so consented in writing. All Amendments, when properly executed, shall become a part of this contract.

**ARTICLE XIV – SECURITY OF ELECTRONIC AND NATIONAL SECURITY INFORMATION**

- A. The CONSULTANT may have access to the DISTRICT data network, (the "Corporate" Network) only if that access is required by the Scope of Work. When using the Corporate Network the CONSULTANT shall comply with Directive 99, DISTRICT Information Security, as it may be amended. A copy of Directive 99 will be furnished the Consultant upon request.
- B. If the CONSULTANT requires access to the Internet while performing this contract the CONSULTANT may utilize the DISTRICT'S Internet access (the "Guest" Network) for that purpose and when doing so may use equipment that is not owned by the DISTRICT. The CONSULTANT shall not use the DISTRICT Corporate Network for Internet access.
- C. The CONSULTANT may arrange access to either the Corporate Network or to the Guest Network through the Information Technology Services (ITS) help desk with 48-hours' advance notice.

**ARTICLE XIV – SECURITY OF ELECTRONIC AND NATIONAL SECURITY INFORMATION**  
**(continued)**

- D. The CONSULTANT may have access to any Critical Infrastructure Information only if that access is required by the Scope of Work. If such access is authorized by the Scope of Work, an effort will be made to identify it in the Scope of Work. If such access is required by the Scope of Work, whether or not specifically identified, the CONSULTANT shall: (i) comply with all written requirements and instructions furnished to the CONSULTANT by a District Critical Infrastructure Information Officer; (ii) treat all Critical Infrastructure Information as privileged and confidential, and release the information to any third party, or to any of the CONSULTANT's employees, contractors, subconsultants, officers, or agents, only upon the DISTRICT's written consent; and (iii) if instructed by the DISTRICT to file any Critical Infrastructure Information with any federal, state, or local government, prominently mark such information as Critical Electric Infrastructure Information in accordance with 6 C.F.R. § 29.5(a)(3) and ensure that such information is protected in accordance with all applicable laws and regulations. The CONSULTANT, and any employee, contractor, subconsultant, officer or agent of the CONSULTANT with access to information concerning any Critical Infrastructure Information shall read and comply with any and all NERC, WECC, FERC, and DISTRICT policies concerning protection of Critical Infrastructure Information, and shall attend such training programs or seminars as the DISTRICT may require. For purposes of this Subsection D, "Critical Infrastructure Information" means any and all information concerning any Critical Asset or Cyber Critical Asset, as identified pursuant to North American Electric Reliability Corporation ("NERC") Standard CIP-002 (including any revision or modification of that Standard adopted by NERC or the Western Electricity Coordinating Council ("WECC")) and any information identified as Critical Energy Infrastructure Information by the Federal Energy Regulatory Commission in 18 C.F.R. §388.113, including any revisions or modifications thereto.

**ARTICLE XV – PUBLICATIONS**

The CONSULTANT shall not publicize or advertise at any time any articles, photos, drawings, technical data or other information regarding the project without the prior written approval of the DISTRICT.

**ARTICLE XVI – CONFIDENTIALITY**

- A. The CONSULTANT, including its officers, agents, and employees, shall hold and maintain as confidential all information concerning its study findings and recommendations in connection with the project, the business of the DISTRICT, the DISTRICT'S financial affairs, and the DISTRICT'S relations with its employees and customers, as well as any other information which may be specifically classified as confidential by the DISTRICT.
- B. If the CONSULTANT provides the DISTRICT with documents or "writings" (as defined in the Washington Public Records Act, Chapter 42.56 RCW) that the CONSULTANT considers to be confidential or proprietary, the CONSULTANT must prominently mark such documents "Confidential" upon all applicable pages or inform the DISTRICT of that claim in writing regarding electronic records. If the DISTRICT receives a Public Records request or a subpoena for any of those documents or "writings" it will not release them, unless required to do so, sooner than ten (10) days after giving the CONSULTANT written notice in the manner provided herein to allow the CONSULTANT to commence litigation to prevent the release. The entire expense of such litigation including the DISTRICT'S attorneys' fees and costs and any amounts that the DISTRICT is required to pay, specifically including any damages imposed upon the DISTRICT for any failure or delay in releasing the records, shall be paid by the CONSULTANT. The DISTRICT shall have no liability for releasing the documents or "writings" if the CONSULTANT does not commence litigation, as established by court papers served upon the DISTRICT, to prevent release within the ten (10) day notice period.

1.12

**ARTICLE XVII - DEBARMENT CERTIFICATION**

The CONSULTANT certifies that the CONSULTANT is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in this Agreement by any Federal department or agency. The CONSULTANT shall immediately provide written notice to the DISTRICT if at any time the CONSULTANT learns that it has become debarred, suspended, proposed for debarment, declared ineligible or is voluntarily excluded from participating in this Agreement by any Federal department or agency, or if at any time the CONSULTANT learns that this certification was erroneous when submitted or has become erroneous by reason of changed circumstances. In addition, the CONSULTANT shall not award any subcontract under this Contract to any party which is debarred, suspended or otherwise excluded from or ineligible for participation (as more fully described above) in any Federal assistance programs, except with the express written consent of the District.

**ARTICLE XVIII – NOTICES**

All notices required to be given hereunder shall be deemed to be sufficiently given if delivered in person or if sent by U.S. Mail, postage prepaid, to the DISTRICT'S Project Leader or to the CONSULTANT'S Project Manager at the addresses set forth above or to the Office of the General Manager of the DISTRICT, or the Office of the CONSULTANT at the addresses set forth below. Either party may designate other addresses from time to time by giving written notice to the other but notice to more than one address cannot be required. Notice given by U.S. Mail shall be presumed to be received three (3) days after mailing on any day other than a Sunday or a legal holiday. If the last day of the three (3) day period is a Saturday, Sunday or legal holiday the period shall be extended to the end of the next day which is neither a Saturday, Sunday or legal holiday.

Office of the DISTRICT General Manager:

Street Address: 2320 California Street  
Everett, WA 98201

Mailing Address: P.O. Box 1107  
Everett, WA 98206-1107

Office of the CONSULTANT:

Street Address: 610 W Prospect St.  
Seattle, WA 98119

Mailing Address: - same -

**ARTICLE XIX – NONWAIVER**

The failure of the DISTRICT to insist upon or enforce strict performance by the CONSULTANT of any provision of this contract, or to exercise any right under this contract, shall not be construed as a waiver or relinquishment to any extent of the DISTRICT'S right to assert or rely upon any such provision or right in that or any other instance; rather, the same shall be and remain in full force and effect.



**ARTICLE XX - ENTIRE AGREEMENT**

The DISTRICT and the CONSULTANT understand and agree that this document constitutes the whole contract between them and supersedes all other prior agreements and understandings, whether oral or written. This contract shall not be modified or amended except by written Amendment.

**ARTICLE XXI - GOVERNING LAW**

This contract shall be governed by the laws of the State of Washington (without regard to any conflicts of law principles applied in that State), with venue for any disputes in Snohomish County, Washington; provided that venue for any matter that is within the jurisdiction of the Federal Court shall be in the United States District Court for the Western District of Washington at Seattle, Washington. Each Party hereby irrevocably waives, to the fullest extent it may effectively do so, the defense of an inconvenient forum to the maintenance of proceedings in such courts.

IN WITNESS WHEREOF, the parties hereto have entered into this contract:

PUBLIC UTILITY DISTRICT NO. 1  
OF SNOHOMISH COUNTY

1ENERGY SYSTEMS, INC.

BY: \_\_\_\_\_

Judy Spence

TITLE: Manager, Contracts & Purchasing

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

David Kaplan

TITLE: CEO

DATE: \_\_\_\_\_

1.13

---

**From:** Cornwell, Tania  
**Sent:** Thursday, August 25, 2011 11:06 AM  
**To:** 'David Kaplan'  
**Subject:** Contract 64081 - Energy Storage System Field Test Project  
**Attachments:** STANDARD Boilerplate (Rev. 2 8 11)-1\_1Energy\_2011-08-01.docx

**Importance:** High

David,

There was only one requested modification to the boilerplate which was not accepted. The interest rate on overdue payments was changed from 1.5 to 1 percent. Revised Code of Washington (Section 19.52.020) only allows a maximum of 12% annually, or 1% monthly.

If you are okay with this, please respond with your approval and I will finalize all documents.

Thank you.

Tania J. Cornwell  
Public Utility District No. 1  
of Snohomish County  
PO Box 1107, M/S O2  
Everett, WA 98206  
P: (425) 783-5667  
F: (425) 267-6523

1.14

---

**From:** Herrling, James  
**Sent:** Thursday, August 25, 2011 8:56 AM  
**To:** Cornwell, Tania  
**Cc:** Barnes, Janet; Collar, Craig  
**Subject:** RE: 1Energy

Tania, I talked to Craig Collar about the need for Professional Liability insurance for this contract. Craig said he has discussed this issue with Chris Heimgartner and they believe 1Energy System's role will be primarily managerial. The technical aspects and recommendations that come out of this project will be reviewed and managed by our in-house staff. Therefore we are willing to waive the need for professional liability insurance. Please feel free to contact either Craig or myself if you need any additional information. Thanks, Jim

Jim Herrling  
Snohomish County PUD  
(425)783-8303  
[jlherrling@snopud.com](mailto:jlherrling@snopud.com)

---

**From:** Cornwell, Tania  
**Sent:** Wednesday, August 24, 2011 8:28 AM  
**To:** Herrling, James  
**Cc:** Barnes, Janet  
**Subject:** 1Energy

Hi Jim,

Were you able to talk to Anne regarding 1Energy and removing the Professional Liability requirement? Craig is targeting the September 6<sup>th</sup> commission meeting so my deadline is Friday.

Tania J. Cornwell  
Public Utility District No. 1  
of Snohomish County  
PO Box 1107, M/S O2  
Everett, WA 98206  
P: (425) 783-5667  
F: (425) 267-6523

1.15

---

**From:** Barnes, Janet  
**Sent:** Thursday, August 25, 2011 10:35 AM  
**To:** Cornwell, Tania  
**Subject:** FW: 1Energy

Not knowing if Jim initialed the footer, I went ahead and did it.

Jan

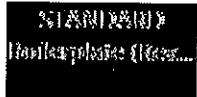
**Janet E. Barnes**  
Risk Manager | Public Utility District No.1 Of Snohomish County  
2320 California Street | Everett, WA 98201  
P: (425)783-8621 | F: (425)267-6468 | C: (425)210-7393  
jebarnes@snopud.com

---

**From:** Cornwell, Tania  
**Sent:** Thursday, August 25, 2011 9:11 AM  
**To:** Herrling, James  
**Cc:** Barnes, Janet  
**Subject:** RE: 1Energy

Jim or Jan,

I will just need the attached boilerplate initialed. Thanks!



---

**From:** Herrling, James  
**Sent:** Thursday, August 25, 2011 8:56 AM  
**To:** Cornwell, Tania  
**Cc:** Barnes, Janet; Collar, Craig  
**Subject:** RE: 1Energy

Tania, I talked to Craig Collar about the need for Professional Liability insurance for this contract. Craig said he has discussed this issue with Chris Heimgartner and they believe 1Energy System's role will be primarily managerial. The technical aspects and recommendations that come out of this project will be reviewed and managed by our in-house staff. Therefore we are willing to waive the need for professional liability insurance. Please feel free to contact either Craig or myself if you need any additional information. Thanks, Jim

Jim Herrling



1.15  
Snohomish County PUD  
(425)783-8303  
[jlherrling@snopud.com](mailto:jlherrling@snopud.com)

---

**From:** Cornwell, Tania  
**Sent:** Wednesday, August 24, 2011 8:28 AM  
**To:** Herrling, James  
**Cc:** Barnes, Janet  
**Subject:** 1Energy

Hi Jim,

Were you able to talk to Anne regarding 1Energy and removing the Professional Liability requirement? Craig is targeting the September 6<sup>th</sup> commission meeting so my deadline is Friday.

Tania J. Cornwell  
Public Utility District No. 1  
of Snohomish County  
PO Box 1107, M/S O2  
Everett, WA 98206  
P: (425) 783-5667  
F: (425) 267-6523

1.16

---

**From:** Cornwell, Tania  
**Sent:** Tuesday, September 06, 2011 4:21 PM  
**To:** 'David Kaplan'  
**Subject:** Contract 64081 - Energy Storage System Field Test Project

David,

The Board of Commissioners voted on the above-mentioned contract today and approved for your countersignature. I missed our mail pickup so the original contract will go out in tomorrow's mail. I thought I would send you an electronic copy in case you needed it to get things going on your end.

If you have any questions, please let me know.

Thank you.



11:14:33 PM

Tania J. Cornwell  
Public Utility District No. 1  
of Snohomish County  
PO Box 1107, M/S O2  
Everett, WA 98206  
P: (425) 783-5667  
F: (425) 267-6523

1.17

**From:** Cornwell, Tania  
**Sent:** Thursday, September 08, 2011 2:06 PM  
**To:** Barnes, Janet  
**Subject:** FW: Contract 64081 - Energy Storage System Field Test Project  
**Attachments:** 00000301-07-34.PDF; ss00080405.pdf

Jan,

Here is David Kaplan's insurance (we waived the professional). It looks good to me, but was hoping for confirmation. Thanks!

---

**From:** DOUG J. AKIYOSHI [mailto:doug@qrmsinc.com]  
**Sent:** Thursday, September 08, 2011 1:59 PM  
**To:** Cornwell, Tania  
**Cc:** 'David Kaplan'  
**Subject:** RE: Contract 64081 - Energy Storage System Field Test Project

Hi Tania,

Thank you for taking the time to review and confirm the PUD's insurance requirements. Attached is a copy of the certificate of insurance (COI) and a copy of the endorsement. Please review and let me know if you have any questions or if any changes are required.

Thank you,

*Doug J. Akiyoshi*

QRMS, Inc.

quality risk management services, inc.

PO Box 580

Mercer Island, WA 98040

phone: (206) 230-0474

toll free: (888) 271-5444

fax: (206) 230-0963

email: [doug@qrmsinc.com](mailto:doug@qrmsinc.com)

web: [www.QRMSInc.com](http://www.QRMSInc.com)

\*\*\* This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager. This message contains confidential information and is intended only for the individual named. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited.\*\*\*

---

**From:** David Kaplan [mailto:davek@1energysystems.com]  
**Sent:** Thursday, September 08, 2011 10:44 AM  
**To:** DOUG AKIYOSHI; Cornwell, Tania  
**Subject:** RE: Contract 64081 - Energy Storage System Field Test Project

Doug, I'm connecting you via email with Tania Cornwell, contracts administrator at Snohomish County PUD. When you have 1Energy's proof of insurance ready, please send it directly to Tania, cc me. Tania's contact information is below if you have any questions.

Tania, please let Doug know which insurance documents Snohomish County PUD requires for this contract.

Thanks,  
Dave

1.17

----- Original Message -----

Subject: RE: Contract 64081 - Energy Storage System Field Test Project  
From: "David Kaplan" <davek@1energysystems.com>  
Date: Thu, September 08, 2011 10:34 am  
To: "Cornwell,Tania" <TJCornwell@snopud.com>

Tania, attached is my signed signature page 10, and an amended page 2 (corrects oversight on 1% interest rate).

I'll connect you via email with Doug Akiyoshi, our insurance agent.

Let me know if you need anything else.

Thanks,  
Dave

----- Original Message -----

Subject: RE: Contract 64081 - Energy Storage System Field Test Project  
From: "Cornwell, Tania" <TJCornwell@snopud.com>  
Date: Wed, September 07, 2011 9:22 am  
To: "David Kaplan" <davek@1energysystems.com>

Yes that works.

---

**From:** David Kaplan [mailto:davek@1energysystems.com]  
**Sent:** Wednesday, September 07, 2011 9:01 AM  
**To:** Cornwell, Tania  
**Subject:** RE: Contract 64081 - Energy Storage System Field Test Project

OK, thanks.

Is an emailed image of signature page OK to countersign? (And follow up with original once I receive it.)

----- Original Message -----

Subject: RE: Contract 64081 - Energy Storage System Field Test Project  
From: "Cornwell, Tania" <TJCornwell@snopud.com>  
Date: Wed, September 07, 2011 8:18 am  
To: "David Kaplan" <davek@1energysystems.com>

David,

It is a separate document. Once I receive a countersigned copy of the contract and all required insurance documents, I will issue the Notice to Proceed.

---

**From:** David Kaplan [mailto:davek@1energysystems.com]  
**Sent:** Tuesday, September 06, 2011 10:49 PM  
**To:** Cornwell, Tania  
**Subject:** RE: Contract 64081 - Energy Storage System Field Test Project

Tania, thanks.



1.17

Will the signed contract constitute Notice to Proceed, or is that a separate document?

Dave

----- Original Message -----

Subject: Contract 64081 - Energy Storage System Field Test Project

From: "Cornwell, Tania" <[TJCornwell@snopud.com](mailto:TJCornwell@snopud.com)>

Date: Tue, September 06, 2011 4:20 pm

To: "David Kaplan" <[davek@1energysystems.com](mailto:davek@1energysystems.com)>

David,

The Board of Commissioners voted on the above-mentioned contract today and approved for your countersignature. I missed our mail pickup so the original contract will go out in tomorrow's mail. I thought I would send you an electronic copy in case you needed it to get things going on your end.

If you have any questions, please let me know.

Thank you.

Tania J. Cornwell  
Public Utility District No. 1  
of Snohomish County  
PO Box 1107, M/S O2  
Everett, WA 98206  
P: (425) 783-5667  
F: (425) 267-6523

1018

|  |  |   |
|--|--|---|
| <b>ACORD™ CERTIFICATE OF LIABILITY INSURANCE</b>   |  | DATE (MM/DD/YYYY)<br><b>09/08/2011</b>  |
| <b>PRODUCER</b><br>QRMS, Inc.<br>PO Box 580<br>Mercer Island, WA 98040<br>Phone: (206)230-0474 |  | THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. |
| <b>INSURED</b><br>1Energy Systems<br>610 WEST PROSPECT<br>SEATTLE, WA 98119                    |  |   |
| <b>INSURERS AFFORDING COVERAGE</b>   |  | <b>NAIC #</b>   |
| INSURER A: <b>The Hartford</b>   |  |   |
| INSURER B:   |  |   |
| INSURER C:   |  |   |
| INSURER D:   |  |   |
| INSURER E:   |  |   |

**COVERAGES**

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR ADDL LTR INSRD | TYPE OF INSURANCE   | POLICY NUMBER | POLICY EFFECTIVE DATE (MM/DD/YY) | POLICY EXPIRATION DATE (MM/DD/YY) | LIMITS  |
|---------------------|---|---------------|----------------------------------|-----------------------------------|---|
| A                   | <b>GENERAL LIABILITY</b><br><input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY<br><input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR<br>GEN'L AGGREGATE LIMIT APPLIES PER:<br><input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC | 52SBMPU1160   | 09/12/2011                       | 09/12/2012                        | EACH OCCURRENCE \$ <b>2,000,000</b><br>DAMAGE TO RENTED PREMISES (Ea occurrence) \$ <b>300,000</b><br>MED EXP (Any one person) \$ <b>10,000</b><br>PERSONAL & ADV INJURY \$ <b>2,000,000</b><br>GENERAL AGGREGATE \$ <b>4,000,000</b><br>PRODUCTS - COMP/OP AGG \$ <b>4,000,000</b> |
| A                   | <b>AUTOMOBILE LIABILITY</b><br><input type="checkbox"/> ANY AUTO<br><input type="checkbox"/> ALL OWNED AUTOS<br><input type="checkbox"/> SCHEDULED AUTOS<br><input checked="" type="checkbox"/> HIRED AUTOS<br><input checked="" type="checkbox"/> NON-OWNED AUTOS  | 52SBMPU1160   | 09/12/2011                       | 09/12/2012                        | COMBINED SINGLE LIMIT (Ea accident) \$ <b>2,000,000</b><br>BODILY INJURY (Per person) \$<br>BODILY INJURY (Per accident) \$<br>PROPERTY DAMAGE (Per accident) \$  |
|                     | <b>GARAGE LIABILITY</b><br><input type="checkbox"/> ANY AUTO  |               |                                  |                                   | AUTO ONLY - EA ACCIDENT \$<br>OTHER THAN EA ACC \$<br>AUTO ONLY: AGG \$   |
|                     | <b>EXCESS/UMBRELLA LIABILITY</b><br><input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE<br>DEDUCTIBLE \$<br>RETENTION \$  |               |                                  |                                   | EACH OCCURRENCE \$<br>AGGREGATE \$<br>\$<br>\$<br>\$  |
| A                   | <b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b><br>ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?<br>If yes, describe under SPECIAL PROVISIONS below<br>OTHER   | 52SBMPU1160   | 09/12/2011                       | 09/12/2012                        | <input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER <b>Stop Gap</b><br>E.L. EACH ACCIDENT \$ <b>1,000,000</b><br>E.L. DISEASE - EA EMPLOYEE \$ <b>1,000,000</b><br>E.L. DISEASE - POLICY LIMIT \$ <b>1,000,000</b>                             |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

Public Utility District No. 1 of Snohomish County is named as an additional insured with respect to work performed by the insured during the term of the policy per endorsement form SS 0008.

**CERTIFICATE HOLDER**

Public Utility District No. 1  
of Snohomish County  
PO Box 1107, M/S O2  
Everett, WA 98206

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

*[Signature]*

(DJA)

1.18

## **BUSINESS LIABILITY COVERAGE FORM**

1.18

**QUICK REFERENCE  
BUSINESS LIABILITY COVERAGE FORM  
READ YOUR POLICY CAREFULLY**

**BUSINESS LIABILITY COVERAGE FORM**

**Beginning on Page**

|  |           |
|--|-----------|
| <b>A. COVERAGES</b>  | <b>1</b>  |
| Business Liability   | 1         |
| Medical Expenses   | 2         |
| Coverage Extension - Supplementary Payments                      | 2         |
| <b>B. EXCLUSIONS</b>   | <b>3</b>  |
| <b>C. WHO IS AN INSURED</b>                                      | <b>10</b> |
| <b>D. LIABILITY AND MEDICAL EXPENSES<br/>LIMITS OF INSURANCE</b> | <b>14</b> |
| <b>E. LIABILITY AND MEDICAL EXPENSES GENERAL CONDITIONS</b>      | <b>15</b> |
| 1. Bankruptcy  | 15        |
| 2. Duties In The Event Of Occurrence, Offense, Claim Or Suit     | 15        |
| 3. Financial Responsibility Laws                                 | 16        |
| 4. Legal Action Against Us                                       | 16        |
| 5. Separation Of Insureds  | 16        |
| 6. Representations   | 16        |
| 7. Other Insurance   | 16        |
| 8. Transfer Of Rights Of Recovery Against Others To Us           | 17        |
| <b>F. OPTIONAL ADDITIONAL INSURED COVERAGES</b>                  | <b>18</b> |
| Additional Insureds  | 18        |
| <b>G. LIABILITY AND MEDICAL EXPENSES DEFINITIONS</b>             | <b>20</b> |



1.18



## BUSINESS LIABILITY COVERAGE FORM

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy the words "you" and "your" refer to the Named Insured shown in the Declarations. The words "we", "us" and "our" refer to the stock insurance company member of The Hartford providing this insurance.

The word "insured" means any person or organization qualifying as such under Section C. - Who Is An Insured.

Other words and phrases that appear in quotation marks have special meaning. Refer to Section G. - Liability And Medical Expenses Definitions.

### A. COVERAGES

#### 1. BUSINESS LIABILITY COVERAGE (BODILY INJURY, PROPERTY DAMAGE, PERSONAL AND ADVERTISING INJURY)

##### Insuring Agreement

- a. We will pay those sums that the insured becomes legally obligated to pay as damages because of "bodily injury", "property damage" or "personal and advertising injury" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages for "bodily injury", "property damage" or "personal and advertising injury" to which this insurance does not apply.

We may, at our discretion, investigate any "occurrence" or offense and settle any claim or "suit" that may result. But:

- (1) The amount we will pay for damages is limited as described in Section D. - Liability And Medical Expenses Limits Of Insurance; and
- (2) Our right and duty to defend ends when we have used up the applicable limit of insurance in the payment of judgments, settlements or medical expenses to which this insurance applies.

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under Coverage Extension - Supplementary Payments.

- b. This insurance applies:

- (1) To "bodily injury" and "property damage" only if:

- (a) The "bodily injury" or "property damage" is caused by an "occurrence" that takes place in the "coverage territory";

- (b) The "bodily injury" or "property damage" occurs during the policy period; and

- (c) Prior to the policy period, no insured listed under Paragraph 1. of Section C. - Who Is An Insured and no "employee" authorized by you to give or receive notice of an "occurrence" or claim, knew that the "bodily injury" or "property damage" had occurred, in whole or in part. If such a listed insured or authorized "employee" knew, prior to the policy period, that the "bodily injury" or "property damage" occurred, then any continuation, change or resumption of such "bodily injury" or "property damage" during or after the policy period will be deemed to have been known prior to the policy period.

- (2) To "personal and advertising injury" caused by an offense arising out of your business, but only if the offense was committed in the "coverage territory" during the policy period.

- c. "Bodily injury" or "property damage" will be deemed to have been known to have occurred at the earliest time when any insured listed under Paragraph 1. of Section C. - Who Is An Insured or any "employee" authorized by you to give or receive notice of an "occurrence" or claim:

- (1) Reports all, or any part, of the "bodily injury" or "property damage" to us or any other insurer;

## BUSINESS LIABILITY COVERAGE FORM

1.18

- (2) Receives a written or verbal demand or claim for damages because of the "bodily injury" or "property damage"; or
- (3) Becomes aware by any other means that "bodily injury" or "property damage" has occurred or has begun to occur.
- d. Damages because of "bodily injury" include damages claimed by any person or organization for care, loss of services or death resulting at any time from the "bodily injury".
- e. **Incidental Medical Malpractice**
  - (1) "Bodily injury" arising out of the rendering of or failure to render professional health care services as a physician, dentist, nurse, emergency medical technician or paramedic shall be deemed to be caused by an "occurrence", but only if:
    - (a) The physician, dentist, nurse, emergency medical technician or paramedic is employed by you to provide such services; and
    - (b) You are not engaged in the business or occupation of providing such services.
  - (2) For the purpose of determining the limits of insurance for incidental medical malpractice, any act or omission together with all related acts or omissions in the furnishing of these services to any one person will be considered one "occurrence".

## 2. MEDICAL EXPENSES

### Insuring Agreement

- a. We will pay medical expenses as described below for "bodily injury" caused by an accident:
  - (1) On premises you own or rent;
  - (2) On ways next to premises you own or rent; or
  - (3) Because of your operations;provided that:
  - (1) The accident takes place in the "coverage territory" and during the policy period;
  - (2) The expenses are incurred and reported to us within three years of the date of the accident; and
  - (3) The injured person submits to examination, at our expense, by physicians of our choice as often as we reasonably require.

- b. We will make these payments regardless of fault. These payments will not exceed the applicable limit of insurance. We will pay reasonable expenses for:

- (1) First aid administered at the time of an accident;
- (2) Necessary medical, surgical, x-ray and dental services, including prosthetic devices; and
- (3) Necessary ambulance, hospital, professional nursing and funeral services.

## 3. COVERAGE EXTENSION - SUPPLEMENTARY PAYMENTS

- a. We will pay, with respect to any claim or "suit" we investigate or settle, or any "suit" against an insured we defend:
  - (1) All expenses we incur.
  - (2) Up to \$1,000 for the cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which Business Liability Coverage for "bodily injury" applies. We do not have to furnish these bonds.
  - (3) The cost of appeal bonds or bonds to release attachments, but only for bond amounts within the applicable limit of insurance. We do not have to furnish these bonds.
  - (4) All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to \$500 a day because of time off from work.
  - (5) All costs taxed against the insured in the "suit".
  - (6) Prejudgment interest awarded against the insured on that part of the judgment we pay. If we make an offer to pay the applicable limit of insurance, we will not pay any prejudgment interest based on that period of time after the offer.
  - (7) All interest on the full amount of any judgment that accrues after entry of the judgment and before we have paid, offered to pay, or deposited in court the part of the judgment that is within the applicable limit of insurance.

Any amounts paid under (1) through (7) above will not reduce the limits of insurance.

- b. If we defend an insured against a "suit" and an indemnitee of the insured is also named as a party to the "suit", we will defend that indemnitee if all of the following conditions are met:

- (1) The "suit" against the indemnitee seeks damages for which the insured has assumed the liability of the indemnitee in a contract or agreement that is an "insured contract";
- (2) This insurance applies to such liability assumed by the insured;
- (3) The obligation to defend, or the cost of the defense of, that indemnitee, has also been assumed by the insured in the same "insured contract";
- (4) The allegations in the "suit" and the information we know about the "occurrence" are such that no conflict appears to exist between the interests of the insured and the interest of the indemnitee;
- (5) The indemnitee and the insured ask us to conduct and control the defense of that indemnitee against such "suit" and agree that we can assign the same counsel to defend the insured and the indemnitee; and
- (6) The indemnitee:
  - (a) Agrees in writing to:
    - (i) Cooperate with us in the investigation, settlement or defense of the "suit";
    - (ii) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the "suit";
    - (iii) Notify any other insurer whose coverage is available to the indemnitee; and
    - (iv) Cooperate with us with respect to coordinating other applicable insurance available to the indemnitee; and
  - (b) Provides us with written authorization to:
    - (i) Obtain records and other information related to the "suit"; and
    - (ii) Conduct and control the defense of the indemnitee in such "suit".

So long as the above conditions are met, attorneys' fees incurred by us in the defense of that indemnitee, necessary litigation expenses incurred by us and necessary litigation expenses incurred by the indemnitee at our request will be paid as Supplementary Payments.

Notwithstanding the provisions of Paragraph 1.b.(b) of Section B. – Exclusions, such payments will not be deemed to be damages for "bodily injury" and "property damage" and will not reduce the Limits of Insurance.

Our obligation to defend an insured's indemnitee and to pay for attorneys' fees and necessary litigation expenses as Supplementary Payments ends when:

- (1) We have used up the applicable limit of insurance in the payment of judgments or settlements; or
- (2) The conditions set forth above, or the terms of the agreement described in Paragraph (6) above, are no longer met.

## B. EXCLUSIONS

### 1. Applicable To Business Liability Coverage

This insurance does not apply to:

#### a. Expected Or Intended Injury

- (1) "Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" or "property damage" resulting from the use of reasonable force to protect persons or property; or
- (2) "Personal and advertising injury" arising out of an offense committed by, at the direction of or with the consent or acquiescence of the insured with the expectation of inflicting "personal and advertising injury".

#### b. Contractual Liability

- (1) "Bodily injury" or "property damage"; or
- (2) "Personal and advertising injury"

for which the insured is obligated to pay damages by reason of the assumption of liability in a contract or agreement.

This exclusion does not apply to liability for damages because of:

- (a) "Bodily injury", "property damage" or "personal and advertising injury" that the insured would have in the absence of the contract or agreement; or

(b) "Bodily injury" or "property damage" assumed in a contract or agreement that is an "insured contract", provided the "bodily injury" or "property damage" occurs subsequent to the execution of the contract or agreement. Solely for the purpose of liability assumed in an "insured contract", reasonable attorneys' fees and necessary litigation expenses incurred by or for a party other than an insured are deemed to be damages because of "bodily injury" or "property damage" provided:

- (i) Liability to such party for, or for the cost of, that party's defense has also been assumed in the same "insured contract", and
- (ii) Such attorneys' fees and litigation expenses are for defense of that party against a civil or alternative dispute resolution proceeding in which damages to which this insurance applies are alleged.

**c. Liquor Liability**

"Bodily injury" or "property damage" for which any insured may be held liable by reason of:

- (1) Causing or contributing to the intoxication of any person;
- (2) The furnishing of alcoholic beverages to a person under the legal drinking age or under the influence of alcohol; or
- (3) Any statute, ordinance or regulation relating to the sale, gift, distribution or use of alcoholic beverages.

This exclusion applies only if you are in the business of manufacturing, distributing, selling, serving or furnishing alcoholic beverages.

**d. Workers' Compensation And Similar Laws**

Any obligation of the insured under a workers' compensation, disability benefits or unemployment compensation law or any similar law.

**e. Employer's Liability**

"Bodily injury" to:

- (1) An "employee" of the insured arising out of and in the course of:
  - (a) Employment by the insured; or

(b) Performing duties related to the conduct of the insured's business, or

- (2) The spouse, child, parent, brother or sister of that "employee" as a consequence of (1) above.

This exclusion applies:

- (1) Whether the insured may be liable as an employer or in any other capacity; and
- (2) To any obligation to share damages with or repay someone else who must pay damages because of the injury.

This exclusion does not apply to liability assumed by the insured under an "insured contract".

**f. Pollution**

- (1) "Bodily injury", "property damage" or "personal and advertising injury" arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants":

(a) At or from any premises, site or location which is or was at any time owned or occupied by, or rented or loaned to any insured. However, this subparagraph does not apply to:

- (i) "Bodily injury" if sustained within a building and caused by smoke, fumes, vapor or soot produced by or originating from equipment that is used to heat, cool or dehumidify the building, or equipment that is used to heat water for personal use, by the building's occupants or their guests;

(ii) "Bodily injury" or "property damage" for which you may be held liable, if you are a contractor and the owner or lessee of such premises, site or location has been added to your policy as an additional insured with respect to your ongoing operations performed for that additional insured at that premises, site or location and such premises, site or location is not and never was owned or occupied by, or rented or loaned to, any insured, other than that additional insured; or

- (iii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire";
  - (b) At or from any premises, site or location which is or was at any time used by or for any insured or others for the handling, storage, disposal, processing or treatment of waste;
  - (c) Which are or were at any time transported, handled, stored, treated, disposed of, or processed as waste by or for:
    - (i) Any insured; or
    - (ii) Any person or organization for whom you may be legally responsible;
  - (d) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the "pollutants" are brought on or to the premises, site or location in connection with such operations by such insured, contractor or subcontractor. However, this subparagraph does not apply to:
    - (i) "Bodily injury" or "property damage" arising out of the escape of fuels, lubricants or other operating fluids which are needed to perform the normal electrical, hydraulic or mechanical functions necessary for the operation of "mobile equipment" or its parts, if such fuels, lubricants or other operating fluids escape from a vehicle part designed to hold, store or receive them. This exception does not apply if the "bodily injury" or "property damage" arises out of the intentional discharge, dispersal or release of the fuels, lubricants or other operating fluids, or if such fuels, lubricants or other operating fluids are brought on or to the premises, site or location with the intent that they be discharged, dispersed or released as part of the operations being performed by such insured, contractor or subcontractor;
    - (ii) "Bodily injury" or "property damage" sustained within a building and caused by the release of gases, fumes or vapors from materials brought into that building in connection with operations being performed by you or on your behalf by a contractor or subcontractor; or
    - (iii) "Bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire"; or
  - (e) At or from any premises, site or location on which any insured or any contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations if the operations are to test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants".
- (2) Any loss, cost or expense arising out of any:
- (a) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants"; or
  - (b) Claim or suit by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of, "pollutants".
- However, this paragraph does not apply to liability for damages because of "property damage" that the insured would have in the absence of such request, demand, order or statutory or regulatory requirement, or such claim or "suit" by or on behalf of a governmental authority.



/ . 18

**g. Aircraft, Auto Or Watercraft**

"Bodily injury" or "property damage" arising out of the ownership, maintenance, use or entrustment to others of any aircraft, "auto" or watercraft owned or operated by or rented or loaned to any insured. Use includes operation and "loading or unloading".

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage" involved the ownership, maintenance, use or entrustment to others of any aircraft, "auto" or watercraft that is owned or operated by or rented or loaned to any insured.

This exclusion does not apply to:

- (1) A watercraft while ashore on premises you own or rent;
- (2) A watercraft you do not own that is:
  - (a) Less than 51 feet long; and
  - (b) Not being used to carry persons for a charge;
- (3) Parking an "auto" on, or on the ways next to, premises you own or rent, provided the "auto" is not owned by or rented or loaned to you or the insured;
- (4) Liability assumed under any "insured contract" for the ownership, maintenance or use of aircraft or watercraft;
- (5) "Bodily injury" or "property damage" arising out of the operation of any of the equipment listed in Paragraph f.(2) or f.(3) of the definition of "mobile equipment"; or
- (6) An aircraft that is not owned by any insured and is hired, chartered or loaned with a paid crew. However, this exception does not apply if the insured has any other insurance for such "bodily injury" or "property damage", whether the other insurance is primary, excess, contingent or on any other basis.

**h. Mobile Equipment**

"Bodily injury" or "property damage" arising out of:

- (1) The transportation of "mobile equipment" by an "auto" owned or operated by or rented or loaned to any insured; or

- (2) The use of "mobile equipment" in, or while in practice or preparation for, a prearranged racing, speed or demolition contest or in any stunting activity.

**i. War**

"Bodily injury", "property damage" or "personal and advertising injury", however caused, arising, directly or indirectly, out of:

- (1) War, including undeclared or civil war;
- (2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

**j. Professional Services**

"Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of or failure to render any professional service. This includes but is not limited to:

- (1) Legal, accounting or advertising services;
- (2) Preparing, approving, or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders, designs or drawings and specifications;
- (3) Supervisory, inspection, architectural or engineering activities;
- (4) Medical, surgical, dental, x-ray or nursing services treatment, advice or instruction;
- (5) Any health or therapeutic service treatment, advice or instruction;
- (6) Any service, treatment, advice or instruction for the purpose of appearance or skin enhancement, hair removal or replacement or personal grooming;
- (7) Optical or hearing aid services including the prescribing, preparation, fitting, demonstration or distribution of ophthalmic lenses and similar products or hearing aid devices;

- (8) Optometry or optometric services including but not limited to examination of the eyes and the prescribing, preparation, fitting, demonstration or distribution of ophthalmic lenses and similar products;
- (9) Any:
  - (a) Body piercing (not including ear piercing);
  - (b) Tattooing, including but not limited to the insertion of pigments into or under the skin; and
  - (c) Similar services;
- (10) Services in the practice of pharmacy; and
- (11) Computer consulting, design or programming services, including web site design.

Paragraphs (4) and (5) of this exclusion do not apply to the Incidental Medical Malpractice coverage afforded under Paragraph 1.e. in Section A. - Coverages.

**k. Damage To Property**

"Property damage" to:

- (1) Property you own, rent or occupy, including any costs or expenses incurred by you, or any other person, organization or entity, for repair, replacement, enhancement, restoration or maintenance of such property for any reason, including prevention of injury to a person or damage to another's property;
- (2) Premises you sell, give away or abandon, if the "property damage" arises out of any part of those premises;
- (3) Property loaned to you;
- (4) Personal property in the care, custody or control of the insured;
- (5) That particular part of real property on which you or any contractors or subcontractors working directly or indirectly on your behalf are performing operations, if the "property damage" arises out of those operations; or
- (6) That particular part of any property that must be restored, repaired or replaced because "your work" was incorrectly performed on it.

Paragraphs (1), (3) and (4) of this exclusion do not apply to "property damage" (other than damage by fire) to premises, including the contents of such premises, rented to you for a period of 7 or fewer consecutive days. A separate Limit of Insurance applies to Damage To Premises Rented To You as described in Section D. - Limits Of Insurance.

Paragraph (2) of this exclusion does not apply if the premises are "your work" and were never occupied, rented or held for rental by you.

Paragraphs (3) and (4) of this exclusion do not apply to the use of elevators.

Paragraphs (3), (4), (5) and (6) of this exclusion do not apply to liability assumed under a sidetrack agreement.

Paragraphs (3) and (4) of this exclusion do not apply to "property damage" to borrowed equipment while not being used to perform operations at a job site.

Paragraph (6) of this exclusion does not apply to "property damage" included in the "products-completed operations hazard".

**l. Damage To Your Product**

"Property damage" to "your product" arising out of it or any part of it.

**m. Damage To Your Work**

"Property damage" to "your work" arising out of it or any part of it and included in the "products-completed operations hazard".

This exclusion does not apply if the damaged work or the work out of which the damage arises was performed on your behalf by a subcontractor.

**n. Damage To Impaired Property Or Property Not Physically Injured**

"Property damage" to "impaired property" or property that has not been physically injured, arising out of:

- (1) A defect, deficiency, inadequacy or dangerous condition in "your product" or "your work"; or
- (2) A delay or failure by you or anyone acting on your behalf to perform a contract or agreement in accordance with its terms.

This exclusion does not apply to the loss of use of other property arising out of sudden and accidental physical injury to "your product" or "your work" after it has been put to its intended use.

1.18

**o. Recall Of Products, Work Or Impaired Property**

Damages claimed for any loss, cost or expense incurred by you or others for the loss of use, withdrawal, recall, inspection, repair, replacement, adjustment, removal or disposal of:

- (1) "Your product";
- (2) "Your work"; or
- (3) "Impaired property";

if such product, work or property is withdrawn or recalled from the market or from use by any person or organization because of a known or suspected defect, deficiency, inadequacy or dangerous condition in it.

**p. Personal And Advertising Injury**

"Personal and advertising injury":

- (1) Arising out of oral, written or electronic publication of material, if done by or at the direction of the insured with knowledge of its falsity;
- (2) Arising out of oral, written or electronic publication of material whose first publication took place before the beginning of the policy period;
- (3) Arising out of a criminal act committed by or at the direction of the insured;
- (4) Arising out of any breach of contract, except an implied contract to use another's "advertising idea" in your "advertisement";
- (5) Arising out of the failure of goods, products or services to conform with any statement of quality or performance made in your "advertisement";
- (6) Arising out of the wrong description of the price of goods, products or services;
- (7) Arising out of any violation of any intellectual property rights such as copyright, patent, trademark, trade name, trade secret, service mark or other designation of origin or authenticity.

However, this exclusion does not apply to infringement, in your "advertisement", of

- (a) Copyright;
- (b) Slogan, unless the slogan is also a trademark, trade name, service mark or other designation of origin or authenticity; or

(c) Title of any literary or artistic work;

**(8) Arising out of an offense committed by an insured whose business is:**

- (a) Advertising, broadcasting, publishing or telecasting;
- (b) Designing or determining content of web sites for others; or
- (c) An Internet search, access, content or service provider.

However, this exclusion does not apply to Paragraphs a., b. and c. under the definition of "personal and advertising injury" in Section G. - Liability And Medical Expenses Definitions.

For the purposes of this exclusion, placing an "advertisement" for or linking to others on your web site, by itself, is not considered the business of advertising, broadcasting, publishing or telecasting;

- (9) Arising out of an electronic chat room or bulletin board the insured hosts, owns, or over which the insured exercises control;
- (10) Arising out of the unauthorized use of another's name or product in your e-mail address, domain name or metatags, or any other similar tactics to mislead another's potential customers;
- (11) Arising out of the violation of a person's right of privacy created by any state or federal act.

However, this exclusion does not apply to liability for damages that the insured would have in the absence of such state or federal act;

**(12) Arising out of:**

- (a) An "advertisement" for others on your web site;
- (b) Placing a link to a web site of others on your web site;
- (c) Content from a web site of others displayed within a frame or border on your web site. Content includes information, code, sounds, text, graphics or images; or
- (d) Computer code, software or programming used to enable:
  - (i) Your web site; or
  - (ii) The presentation or functionality of an "advertisement" or other content on your web site;

- (13) Arising out of a violation of any anti-trust law;
- (14) Arising out of the fluctuation in price or value of any stocks, bonds or other securities; or
- (15) Arising out of discrimination or humiliation committed by or at the direction of any "executive officer", director, stockholder, partner or member of the insured.

**q. Electronic Data**

Damages arising out of the loss of, loss of use of, damage to, corruption of, inability to access, or inability to manipulate "electronic data".

**r. Employment-Related Practices**

"Bodily injury" or "personal and advertising injury" to:

- (1) A person arising out of any:
  - (a) Refusal to employ that person;
  - (b) Termination of that person's employment; or
  - (c) Employment-related practices, policies, acts or omissions, such as coercion, demotion, evaluation, reassignment, discipline, defamation, harassment, humiliation or discrimination directed at that person; or
- (2) The spouse, child, parent, brother or sister of that person as a consequence of "bodily injury" or "personal and advertising injury" to the person at whom any of the employment-related practices described in Paragraphs (a), (b), or (c) above is directed.

This exclusion applies:

- (1) Whether the insured may be liable as an employer or in any other capacity; and
- (2) To any obligation to share damages with or repay someone else who must pay damages because of the injury.

**s. Asbestos**

- (1) "Bodily injury", "property damage" or "personal and advertising injury" arising out of the "asbestos hazard".
- (2) Any damages, judgments, settlements, loss, costs or expenses that:

(a) May be awarded or incurred by reason of any claim or suit alleging actual or threatened injury or damage of any nature or kind to persons or property which would not have occurred in whole or in part but for the "asbestos hazard";

(b) Arise out of any request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, encapsulate, contain, treat, detoxify or neutralize or in any way respond to or assess the effects of an "asbestos hazard"; or

(c) Arise out of any claim or suit for damages because of testing for, monitoring, cleaning up, removing, encapsulating, containing, treating, detoxifying or neutralizing or in any way responding to or assessing the effects of an "asbestos hazard".

**t. Violation Of Statutes That Govern E-Mails, Fax, Phone Calls Or Other Methods Of Sending Material Or Information**

"Bodily injury", "property damage", or "personal and advertising injury" arising directly or indirectly out of any action or omission that violates or is alleged to violate:

- (1) The Telephone Consumer Protection Act (TCPA), including any amendment of or addition to such law;
- (2) The CAN-SPAM Act of 2003, including any amendment of or addition to such law; or
- (3) Any statute, ordinance or regulation, other than the TCPA or CAN-SPAM Act of 2003, that prohibits or limits the sending, transmitting, communicating or distribution of material or information.

**Damage To Premises Rented To You – Exception For Damage By Fire, Lightning or Explosion**

Exclusions c. through h. and k. through o. do not apply to damage by fire, lightning or explosion to premises rented to you or temporarily occupied by you with permission of the owner. A separate Limit of Insurance applies to this coverage as described in Section D. - Liability And Medical Expenses Limits Of Insurance.

## BUSINESS LIABILITY COVERAGE FORM

1.18

### 2. Applicable To Medical Expenses Coverage

We will not pay expenses for "bodily injury":

#### a. Any Insured

To any insured, except "volunteer workers".

#### b. Hired Person

To a person hired to do work for or on behalf of any insured or a tenant of any insured.

#### c. Injury On Normally Occupied Premises

To a person injured on that part of premises you own or rent that the person normally occupies.

#### d. Workers' Compensation And Similar Laws

To a person, whether or not an "employee" of any insured, if benefits for the "bodily injury" are payable or must be provided under a workers' compensation or disability benefits law or a similar law.

#### e. Athletics Activities

To a person injured while practicing, instructing or participating in any physical exercises or games, sports or athletic contests.

#### f. Products-Completed Operations Hazard

Included with the "products-completed operations hazard".

#### g. Business Liability Exclusions

Excluded under Business Liability Coverage.

## C. WHO IS AN INSURED

### 1. If you are designated in the Declarations as:

- a. An individual, you and your spouse are insureds, but only with respect to the conduct of a business of which you are the sole owner.
- b. A partnership or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to the conduct of your business.
- c. A limited liability company, you are an insured. Your members are also insureds, but only with respect to the conduct of your business. Your managers are insureds, but only with respect to their duties as your managers.
- d. An organization other than a partnership, joint venture or limited liability company, you are an insured. Your "executive officers" and directors are insureds, but only with respect to their duties as your officers or directors. Your stockholders are also insureds, but only with respect to their liability as stockholders.

- e. A trust, you are an insured. Your trustees are also insureds, but only with respect to their duties as trustees.

### 2. Each of the following is also an insured:

#### a. Employees And Volunteer Workers

Your "volunteer workers" only while performing duties related to the conduct of your business, or your "employees", other than either your "executive officers" (if you are an organization other than a partnership, joint venture or limited liability company) or your managers (if you are a limited liability company), but only for acts within the scope of their employment by you or while performing duties related to the conduct of your business.

However, none of these "employees" or "volunteer workers" are insureds for:

#### (1) "Bodily injury" or "personal and advertising injury":

- (a) To you, to your partners or members (if you are a partnership or joint venture), to your members (if you are a limited liability company), or to a co-"employee" while in the course of his or her employment or performing duties related to the conduct of your business, or to your other "volunteer workers" while performing duties related to the conduct of your business;

- (b) To the spouse, child, parent, brother or sister of that co-"employee" or that "volunteer worker" as a consequence of Paragraph (1)(a) above;

- (c) For which there is any obligation to share damages with or repay someone else who must pay damages because of the injury described in Paragraphs (1)(a) or (b) above; or

- (d) Arising out of his or her providing or failing to provide professional health care services.

If you are not in the business of providing professional health care services, Paragraph (d) does not apply to any nurse, emergency medical technician or paramedic employed by you to provide such services.

#### (2) "Property damage" to property:

- (a) Owned, occupied or used by,



- (b) Rented to, in the care, custody or control of, or over which physical control is being exercised for any purpose by you, any of your "employees", "volunteer workers", any partner or member (if you are a partnership or joint venture), or any member (if you are a limited liability company).

**b. Real Estate Manager**

Any person (other than your "employee" or "volunteer worker"), or any organization while acting as your real estate manager.

**c. Temporary Custodians Of Your Property**

Any person or organization having proper temporary custody of your property if you die, but only:

- (1) With respect to liability arising out of the maintenance or use of that property; and
- (2) Until your legal representative has been appointed.

**d. Legal Representative If You Die**

Your legal representative if you die, but only with respect to duties as such. That representative will have all your rights and duties under this insurance.

**e. Unnamed Subsidiary**

Any subsidiary and subsidiary thereof, of yours which is a legally incorporated entity of which you own a financial interest of more than 50% of the voting stock on the effective date of this Coverage Part.

The insurance afforded herein for any subsidiary not shown in the Declarations as a named insured does not apply to injury or damage with respect to which an insured under this insurance is also an insured under another policy or would be an insured under such policy but for its termination or upon the exhaustion of its limits of insurance.

**3. Newly Acquired Or Formed Organization**

Any organization you newly acquire or form, other than a partnership, joint venture or limited liability company, and over which you maintain financial interest of more than 50% of the voting stock, will qualify as a Named Insured if there is no other similar insurance available to that organization. However:

- a. Coverage under this provision is afforded only until the 180th day after you acquire or form the organization or the end of the policy period, whichever is earlier; and

- b. Coverage under this provision does not apply to:

- (1) "Bodily injury" or "property damage" that occurred; or
- (2) "Personal and advertising injury" arising out of an offense committed before you acquired or formed the organization.

**4. Operator Of Mobile Equipment**

With respect to "mobile equipment" registered in your name under any motor vehicle registration law, any person is an insured while driving such equipment along a public highway with your permission. Any other person or organization responsible for the conduct of such person is also an insured, but only with respect to liability arising out of the operation of the equipment, and only if no other insurance of any kind is available to that person or organization for this liability. However, no person or organization is an insured with respect to:

- a. "Bodily injury" to a co-"employee" of the person driving the equipment; or
- b. "Property damage" to property owned by, rented to, in the charge of or occupied by you or the employer of any person who is an insured under this provision.

**5. Operator of Nonowned Watercraft**

With respect to watercraft you do not own that is less than 51 feet long and is not being used to carry persons for a charge, any person is an insured while operating such watercraft with your permission. Any other person or organization responsible for the conduct of such person is also an insured, but only with respect to liability arising out of the operation of the watercraft, and only if no other insurance of any kind is available to that person or organization for this liability.

However, no person or organization is an insured with respect to:

- a. "Bodily injury" to a co-"employee" of the person operating the watercraft; or
- b. "Property damage" to property owned by, rented to, in the charge of or occupied by you or the employer of any person who is an insured under this provision.

**6. Additional Insureds When Required By Written Contract, Written Agreement Or Permit**

The person(s) or organization(s) identified in Paragraphs a. through f. below are additional insureds when you have agreed, in a written

1.18

contract, written agreement or because of a permit issued by a state or political subdivision, that such person or organization be added as an additional insured on your policy, provided the injury or damage occurs subsequent to the execution of the contract or agreement, or the issuance of the permit.

A person or organization is an additional insured under this provision only for that period of time required by the contract, agreement or permit.

However, no such person or organization is an additional insured under this provision if such person or organization is included as an additional insured by an endorsement issued by us and made a part of this Coverage Part, including all persons or organizations added as additional insureds under the specific additional insured coverage grants in Section F. – Optional Additional Insured Coverages.

**a. Vendors**

Any person(s) or organization(s) (referred to below as vendor), but only with respect to "bodily injury" or "property damage" arising out of "your products" which are distributed or sold in the regular course of the vendor's business and only if this Coverage Part provides coverage for "bodily injury" or "property damage" included within the "products-completed operations hazard".

- (1) The insurance afforded to the vendor is subject to the following additional exclusions:

This insurance does not apply to:

- (a) "Bodily injury" or "property damage" for which the vendor is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that the vendor would have in the absence of the contract or agreement;
- (b) Any express warranty unauthorized by you;
- (c) Any physical or chemical change in the product made intentionally by the vendor;
- (d) Repackaging, except when unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instructions from the manufacturer, and then repackaged in the original container;

- (e) Any failure to make such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products;

- (f) Demonstration, installation, servicing or repair operations, except such operations performed at the vendor's premises in connection with the sale of the product;

- (g) Products which, after distribution or sale by you, have been labeled or relabeled or used as a container, part or ingredient of any other thing or substance by or for the vendor; or

- (h) "Bodily injury" or "property damage" arising out of the sole negligence of the vendor for its own acts or omissions or those of its employees or anyone else acting on its behalf. However, this exclusion does not apply to:

- (i) The exceptions contained in Subparagraphs (d) or (f); or

- (ii) Such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products.

- (2) This insurance does not apply to any insured person or organization from whom you have acquired such products, or any ingredient, part or container, entering into, accompanying or containing such products.

**b. Lessors Of Equipment**

- (1) Any person or organization from whom you lease equipment; but only with respect to their liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your maintenance, operation or use of equipment leased to you by such person or organization.

1.18

## BUSINESS LIABILITY COVERAGE FORM

- (2) With respect to the insurance afforded to these additional insureds, this insurance does not apply to any "occurrence" which takes place after you cease to lease that equipment.

### c. Lessors Of Land Or Premises

- (1) Any person or organization from whom you lease land or premises, but only with respect to liability arising out of the ownership, maintenance or use of that part of the land or premises leased to you.
- (2) With respect to the insurance afforded to these additional insureds, this insurance does not apply to:
- (a) Any "occurrence" which takes place after you cease to lease that land or be a tenant in that premises; or
  - (b) Structural alterations, new construction or demolition operations performed by or on behalf of such person or organization.

### d. Architects, Engineers Or Surveyors

- (1) Any architect, engineer, or surveyor, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:
- (a) In connection with your premises; or
  - (b) In the performance of your ongoing operations performed by you or on your behalf.
- (2) With respect to the insurance afforded to these additional insureds, the following additional exclusion applies:
- This insurance does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of or the failure to render any professional services by or for you, including:
- (a) The preparing, approving, or failure to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders, designs or drawings and specifications; or
  - (b) Supervisory, inspection, architectural or engineering activities.

### e. Permits Issued By State Or Political Subdivisions

- (1) Any state or political subdivision, but only with respect to operations performed by you or on your behalf for which the state or political subdivision has issued a permit.
- (2) With respect to the insurance afforded to these additional insureds, this insurance does not apply to:
- (a) "Bodily injury", "property damage" or "personal and advertising injury" arising out of operations performed for the state or municipality; or
  - (b) "Bodily injury" or "property damage" included within the "products-completed operations hazard".

### f. Any Other Party

- (1) Any other person or organization who is not an insured under Paragraphs a. through e. above, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:
- (a) In the performance of your ongoing operations;
  - (b) In connection with your premises owned by or rented to you; or
  - (c) In connection with "your work" and included within the "products-completed operations hazard", but only if
    - (i) The written contract or written agreement requires you to provide such coverage to such additional insured; and
    - (ii) This Coverage Part provides coverage for "bodily injury" or "property damage" included within the "products-completed operations hazard".
- (2) With respect to the insurance afforded to these additional insureds, this insurance does not apply to:
- "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

**BUSINESS LIABILITY COVERAGE FORM**

1.18

- (a) The preparing, approving, or failure to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders, designs or drawings and specifications; or

- (b) Supervisory, inspection, architectural or engineering activities.

The limits of insurance that apply to additional insureds are described in Section D. – Limits Of Insurance.

How this insurance applies when other insurance is available to an additional insured is described in the Other Insurance Condition in Section E. – Liability And Medical Expenses General Conditions.

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

**D. LIABILITY AND MEDICAL EXPENSES LIMITS OF INSURANCE**

**1. The Most We Will Pay**

The Limits of Insurance shown in the Declarations and the rules below fix the most we will pay regardless of the number of:

- a. Insureds;
- b. Claims made or "suits" brought; or
- c. Persons or organizations making claims or bringing "suits".

**2. Aggregate Limits**

The most we will pay for:

- a. Damages because of "bodily injury" and "property damage" included in the "products-completed operations hazard" is the Products-Completed Operations Aggregate Limit shown in the Declarations.
- b. Damages because of all other "bodily injury", "property damage" or "personal and advertising injury", including medical expenses, is the General Aggregate Limit shown in the Declarations.

This General Aggregate Limit applies separately to each of your "locations" owned by or rented to you.

"Location" means premises involving the same or connecting lots, or premises whose connection is interrupted only by a street, roadway or right-of-way of a railroad.

This General Aggregate limit does not apply to "property damage" to premises while rented to you or temporarily occupied by you with permission of the owner, arising out of fire, lightning or explosion.

**3. Each Occurrence Limit**

Subject to 2.a. or 2.b above, whichever applies, the most we will pay for the sum of all damages because of all "bodily injury", "property damage" and medical expenses arising out of any one "occurrence" is the Liability and Medical Expenses Limit shown in the Declarations.

The most we will pay for all medical expenses because of "bodily injury" sustained by any one person is the Medical Expenses Limit shown in the Declarations.

**4. Personal And Advertising Injury Limit**

Subject to 2.b. above, the most we will pay for the sum of all damages because of all "personal and advertising injury" sustained by any one person or organization is the Personal and Advertising Injury Limit shown in the Declarations.

**5. Damage To Premises Rented To You Limit**

The Damage To Premises Rented To You Limit is the most we will pay under Business Liability Coverage for damages because of "property damage" to any one premises, while rented to you, or in the case of damage by fire, lightning or explosion, while rented to you or temporarily occupied by you with permission of the owner.

In the case of damage by fire, lightning or explosion, the Damage to Premises Rented To You Limit applies to all damage proximately caused by the same event, whether such damage results from fire, lightning or explosion or any combination of these.

**6. How Limits Apply To Additional Insureds**

The most we will pay on behalf of a person or organization who is an additional insured under this Coverage Part is the lesser of:

- a. The limits of insurance specified in a written contract, written agreement or permit issued by a state or political subdivision; or
- b. The Limits of Insurance shown in the Declarations.

Such amount shall be a part of and not in addition to the Limits of Insurance shown in the Declarations and described in this Section.

1.18

**BUSINESS LIABILITY COVERAGE FORM**

If more than one limit of insurance under this policy and any endorsements attached thereto applies to any claim or "suit", the most we will pay under this policy and the endorsements is the single highest limit of liability of all coverages applicable to such claim or "suit". However, this paragraph does not apply to the Medical Expenses limit set forth in Paragraph 3. above.

The Limits of Insurance of this Coverage Part apply separately to each consecutive annual period and to any remaining period of less than 12 months, starting with the beginning of the policy period shown in the Declarations, unless the policy period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding period for purposes of determining the Limits of Insurance.

## **E. LIABILITY AND MEDICAL EXPENSES GENERAL CONDITIONS**

### **1. Bankruptcy**

Bankruptcy or insolvency of the insured or of the insured's estate will not relieve us of our obligations under this Coverage Part.

### **2. Duties In The Event Of Occurrence, Offense, Claim Or Suit**

#### **a. Notice Of Occurrence Or Offense**

You or any additional insured must see to it that we are notified as soon as practicable of an "occurrence" or an offense which may result in a claim. To the extent possible, notice should include:

- (1) How, when and where the "occurrence" or offense took place;
- (2) The names and addresses of any injured persons and witnesses; and
- (3) The nature and location of any injury or damage arising out of the "occurrence" or offense.

#### **b. Notice Of Claim**

If a claim is made or "suit" is brought against any insured, you or any additional insured must:

- (1) Immediately record the specifics of the claim or "suit" and the date received; and
- (2) Notify us as soon as practicable.

You or any additional insured must see to it that we receive a written notice of the claim or "suit" as soon as practicable.

#### **c. Assistance And Cooperation Of The Insured**

You and any other involved insured must:

- (1) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the claim or "suit";
- (2) Authorize us to obtain records and other information;
- (3) Cooperate with us in the investigation, settlement of the claim or defense against the "suit"; and
- (4) Assist us, upon our request, in the enforcement of any right against any person or organization that may be liable to the insured because of injury or damage to which this insurance may also apply.

#### **d. Obligations At The Insured's Own Cost**

No insured will, except at that insured's own cost, voluntarily make a payment, assume any obligation, or incur any expense, other than for first aid, without our consent.

#### **e. Additional Insured's Other Insurance**

If we cover a claim or "suit" under this Coverage Part that may also be covered by other insurance available to an additional insured, such additional insured must submit such claim or "suit" to the other insurer for defense and indemnity.

However, this provision does not apply to the extent that you have agreed in a written contract, written agreement or permit that this insurance is primary and non-contributory with the additional insured's own insurance.

#### **f. Knowledge Of An Occurrence, Offense, Claim Or Suit**

Paragraphs a. and b. apply to you or to any additional insured only when such "occurrence", offense, claim or "suit" is known to:

- (1) You or any additional insured that is an individual;
- (2) Any partner, if you or an additional insured is a partnership;
- (3) Any manager, if you or an additional insured is a limited liability company;
- (4) Any "executive officer" or insurance manager, if you or an additional insured is a corporation;
- (5) Any trustee, if you or an additional insured is a trust; or
- (6) Any elected or appointed official, if you or an additional insured is a political subdivision or public entity.



This Paragraph f. applies separately to you and any additional insured.

### 3. Financial Responsibility Laws

- a. When this policy is certified as proof of financial responsibility for the future under the provisions of any motor vehicle financial responsibility law, the insurance provided by the policy for "bodily injury" liability and "property damage" liability will comply with the provisions of the law to the extent of the coverage and limits of insurance required by that law.
- b. With respect to "mobile equipment" to which this insurance applies, we will provide any liability, uninsured motorists, underinsured motorists, no-fault or other coverage required by any motor vehicle law. We will provide the required limits for those coverages.

### 4. Legal Action Against Us

No person or organization has a right under this Coverage Form:

- a. To join us as a party or otherwise bring us into a "suit" asking for damages from an insured; or
- b. To sue us on this Coverage Form unless all of its terms have been fully complied with.

A person or organization may sue us to recover on an agreed settlement or on a final judgment against an insured; but we will not be liable for damages that are not payable under the terms of this insurance or that are in excess of the applicable limit of insurance. An agreed settlement means a settlement and release of liability signed by us, the insured and the claimant or the claimant's legal representative.

### 5. Separation Of Insureds

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this policy to the first Named Insured, this insurance applies:

- a. As if each Named Insured were the only Named Insured; and
- b. Separately to each insured against whom a claim is made or "suit" is brought.

### 6. Representations

#### a. When You Accept This Policy

By accepting this policy, you agree:

- (1) The statements in the Declarations are accurate and complete;
- (2) Those statements are based upon representations you made to us; and

- (3) We have issued this policy in reliance upon your representations.

### b. Unintentional Failure To Disclose Hazards

If unintentionally you should fail to disclose all hazards relating to the conduct of your business at the inception date of this Coverage Part, we shall not deny any coverage under this Coverage Part because of such failure.

### 7. Other Insurance

If other valid and collectible insurance is available for a loss we cover under this Coverage Part, our obligations are limited as follows:

#### a. Primary Insurance

This insurance is primary except when b. below applies. If other insurance is also primary, we will share with all that other insurance by the method described in c. below.

#### b. Excess Insurance

This insurance is excess over any of the other insurance, whether primary, excess, contingent or on any other basis:

##### (1) Your Work

That is Fire, Extended Coverage, Builder's Risk, Installation Risk or similar coverage for "your work";

##### (2) Premises Rented To You

That is fire, lightning or explosion insurance for premises rented to you or temporarily occupied by you with permission of the owner;

##### (3) Tenant Liability

That is insurance purchased by you to cover your liability as a tenant for "property damage" to premises rented to you or temporarily occupied by you with permission of the owner;

##### (4) Aircraft, Auto Or Watercraft

If the loss arises out of the maintenance or use of aircraft, "autos" or watercraft to the extent not subject to Exclusion g. of Section A. — Coverages.

##### (5) Property Damage To Borrowed Equipment Or Use Of Elevators

If the loss arises out of "property damage" to borrowed equipment or the use of elevators to the extent not subject to Exclusion k. of Section A. — Coverages.

**(6) When You Are Added As An Additional Insured To Other Insurance**

That is other insurance available to you covering liability for damages arising out of the premises or operations, or products and completed operations, for which you have been added as an additional insured by that insurance; or

**(7) When You Add Others As An Additional Insured To This Insurance**

That is other insurance available to an additional insured.

However, the following provisions apply to other insurance available to any person or organization who is an additional insured under this Coverage Part:

**(a) Primary Insurance When Required By Contract**

This insurance is primary if you have agreed in a written contract, written agreement or permit that this insurance be primary. If other insurance is also primary, we will share with all that other insurance by the method described in c. below.

**(b) Primary And Non-Contributory To Other Insurance When Required By Contract**

If you have agreed in a written contract, written agreement or permit that this insurance is primary and non-contributory with the additional insured's own insurance, this insurance is primary and we will not seek contribution from that other insurance.

Paragraphs (a) and (b) do not apply to other insurance to which the additional insured has been added as an additional insured.

When this insurance is excess, we will have no duty under this Coverage Part to defend the insured against any "suit" if any other insurer has a duty to defend the insured against that "suit". If no other insurer defends, we will undertake to do so, but we will be entitled to the insured's rights against all those other insurers.

When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

- (1) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and
- (2) The total of all deductible and self-insured amounts under all that other insurance.

We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Declarations of this Coverage Part.

**c. Method Of Sharing**

If all the other insurance permits contribution by equal shares, we will follow this method also. Under this approach, each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

**8. Transfer Of Rights Of Recovery Against Others To Us****a. Transfer Of Rights Of Recovery**

If the insured has rights to recover all or part of any payment, including Supplementary Payments, we have made under this Coverage Part, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them. This condition does not apply to Medical Expenses Coverage.

**b. Waiver Of Rights Of Recovery (Waiver Of Subrogation)**

If the insured has waived any rights of recovery against any person or organization for all or part of any payment, including Supplementary Payments, we have made under this Coverage Part, we also waive that right, provided the insured waived their rights of recovery against such person or organization in a contract, agreement or permit that was executed prior to the injury or damage.

**F. OPTIONAL ADDITIONAL INSURED COVERAGES**

If listed or shown as applicable in the Declarations, one or more of the following Optional Additional Insured Coverages also apply. When any of these Optional Additional Insured Coverages apply, Paragraph 6. (Additional Insureds When Required by Written Contract, Written Agreement or Permit) of Section C., Who Is An Insured, does not apply to the person or organization shown in the Declarations. These coverages are subject to the terms and conditions applicable to Business Liability Coverage in this policy, except as provided below:

**1. Additional Insured - Designated Person Or Organization**

WHO IS AN INSURED under Section C. is amended to include as an additional insured the person(s) or organization(s) shown in the Declarations, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:

- a. In the performance of your ongoing operations; or
- b. In connection with your premises owned by or rented to you.

**2. Additional Insured - Managers Or Lessors Of Premises**

- a. WHO IS AN INSURED under Section C. is amended to include as an additional insured the person(s) or organization(s) shown in the Declarations as an Additional Insured - Designated Person Or Organization; but only with respect to liability arising out of the ownership, maintenance or use of that part of the premises leased to you and shown in the Declarations.

- b. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to:

- (1) Any "occurrence" which takes place after you cease to be a tenant in that premises; or
- (2) Structural alterations, new construction or demolition operations performed by or on behalf of such person or organization.

**3. Additional Insured - Grantor Of Franchise**

WHO IS AN INSURED under Section C. is amended to include as an additional insured the person(s) or organization(s) shown in the Declarations as an Additional Insured - Grantor Of Franchise, but only with respect to their liability as grantor of franchise to you.

**4. Additional Insured - Lessor Of Leased Equipment**

- a. WHO IS AN INSURED under Section C. is amended to include as an additional insured the person(s) or organization(s) shown in the Declarations as an Additional Insured - Lessor of Leased Equipment, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your maintenance, operation or use of equipment leased to you by such person(s) or organization(s).

- b. With respect to the insurance afforded to these additional insureds, this insurance does not apply to any "occurrence" which takes place after you cease to lease that equipment.

**5. Additional Insured - Owners Or Other Interests From Whom Land Has Been Leased**

- a. WHO IS AN INSURED under Section C. is amended to include as an additional insured the person(s) or organization(s) shown in the Declarations as an Additional Insured - Owners Or Other Interests From Whom Land Has Been Leased, but only with respect to liability arising out of the ownership, maintenance or use of that part of the land leased to you and shown in the Declarations.

- b. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to:

- (1) Any "occurrence" that takes place after you cease to lease that land; or
- (2) Structural alterations, new construction or demolition operations performed by or on behalf of such person or organization.

**6. Additional Insured - State Or Political Subdivision - Permits**

- a. WHO IS AN INSURED under Section C. is amended to include as an additional insured the state or political subdivision shown in the Declarations as an Additional

Insured – State Or Political Subdivision - Permits, but only with respect to operations performed by you or on your behalf for which the state or political subdivision has issued a permit.

- b. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to:

- (1) "Bodily injury", "property damage" or "personal and advertising injury" arising out of operations performed for the state or municipality; or
- (2) "Bodily injury" or "property damage" included in the "product-completed operations" hazard.

**7. Additional Insured – Vendors**

- a. WHO IS AN INSURED under Section C. is amended to include as an additional insured the person(s) or organization(s) (referred to below as vendor) shown in the Declarations as an Additional Insured - Vendor, but only with respect to "bodily injury" or "property damage" arising out of "your products" which are distributed or sold in the regular course of the vendor's business and only if this Coverage Part provides coverage for "bodily injury" or "property damage" included within the "products-completed operations hazard".
- b. The insurance afforded to the vendor is subject to the following additional exclusions:

- (1) This insurance does not apply to:
  - (a) "Bodily injury" or "property damage" for which the vendor is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that the vendor would have in the absence of the contract or agreement;
  - (b) Any express warranty unauthorized by you;
  - (c) Any physical or chemical change in the product made intentionally by the vendor;
  - (d) Repackaging, unless unpacked solely for the purpose of inspection, demonstration, testing, or the substitution of parts under instructions from the manufacturer, and then repackaged in the original container;

- (e) Any failure to make such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products;

- (f) Demonstration, installation, servicing or repair operations, except such operations performed at the vendor's premises in connection with the sale of the product;

- (g) Products which, after distribution or sale by you, have been labeled or relabeled or used as a container, part or ingredient of any other thing or substance by or for the vendor; or

- (h) "Bodily injury" or "property damage" arising out of the sole negligence of the vendor for its own acts or omissions or those of its employees or anyone else acting on its behalf. However, this exclusion does not apply to:

- (i) The exceptions contained in Subparagraphs (d) or (f); or

- (ii) Such inspections, adjustments, tests or servicing as the vendor has agreed to make or normally undertakes to make in the usual course of business, in connection with the distribution or sale of the products.

- (2) This insurance does not apply to any insured person or organization from whom you have acquired such products, or any ingredient, part or container, entering into, accompanying or containing such products.

**8. Additional Insured – Controlling Interest**

WHO IS AN INSURED under Section C. is amended to include as an additional insured the person(s) or organization(s) shown in the Declarations as an Additional Insured – Controlling Interest, but only with respect to their liability arising out of:

- a. Their financial control of you; or
- b. Premises they own, maintain or control while you lease or occupy these premises.

1.18

This insurance does not apply to structural alterations, new construction and demolition operations performed by or for that person or organization.

**9. Additional Insured – Owners, Lessees Or Contractors – Scheduled Person Or Organization**

a. WHO IS AN INSURED under Section C. is amended to include as an additional insured the person(s) or organization(s) shown in the Declarations as an Additional Insured – Owner, Lessees Or Contractors, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:

(1) In the performance of your ongoing operations for the additional insured(s); or

(2) In connection with "your work" performed for that additional insured and included within the "products-completed operations hazard", but only if this Coverage Part provides coverage for "bodily injury" or "property damage" included within the "products-completed operations hazard".

b. With respect to the insurance afforded to these additional insureds, this insurance does not apply to "bodily injury", "property damage" or "personal an advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

(1) The preparing, approving, or failure to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders, designs or drawings and specifications; or

(2) Supervisory, inspection, architectural or engineering activities.

**10. Additional Insured – Co-Owner Of Insured Premises**

WHO IS AN INSURED under Section C. is amended to include as an additional insured the person(s) or Organization(s) shown in the Declarations as an Additional Insured – Co-Owner Of Insured Premises, but only with respect to their liability as co-owner of the premises shown in the Declarations.

The limits of insurance that apply to additional insureds are described in Section D. – Limits Of Insurance.

How this insurance applies when other insurance is available to an additional insured is described in the Other Insurance Condition in Section E. – Liability And Medical Expenses General Conditions.

**G. LIABILITY AND MEDICAL EXPENSES DEFINITIONS**

1. "Advertisement" means the widespread public dissemination of information or images that has the purpose of inducing the sale of goods, products or services through:

- a. (1) Radio;
- (2) Television;
- (3) Billboard;
- (4) Magazine;
- (5) Newspaper;

b. The Internet, but only that part of a web site that is about goods, products or services for the purposes of inducing the sale of goods, products or services; or

c. Any other publication that is given widespread public distribution.

However, "advertisement" does not include:

a. The design, printed material, information or images contained in, on or upon the packaging or labeling of any goods or products; or

b. An interactive conversation between or among persons through a computer network.

2. "Advertising idea" means any idea for an "advertisement".

3. "Asbestos hazard" means an exposure or threat of exposure to the actual or alleged properties of asbestos and includes the mere presence of asbestos in any form.

4. "Auto" means a land motor vehicle, trailer or semi-trailer designed for travel on public roads, including any attached machinery or equipment. But "auto" does not include "mobile equipment".

5. "Bodily injury" means physical:

- a. Injury;
- b. Sickness; or
- c. Disease

sustained by a person and, if arising out of the above, mental anguish or death at any time.

6. "Coverage territory" means:



- a. The United States of America (including its territories and possessions), Puerto Rico and Canada;
  - b. International waters or airspace, but only if the injury or damage occurs in the course of travel or transportation between any places included in a. above;
  - c. All other parts of the world if the injury or damage arises out of:
    - (1) Goods or products made or sold by you in the territory described in a. above;
    - (2) The activities of a person whose home is in the territory described in a. above, but is away for a short time on your business; or
    - (3) "Personal and advertising injury" offenses that take place through the Internet or similar electronic means of communication

provided the insured's responsibility to pay damages is determined in the United States of America (including its territories and possessions), Puerto Rico or Canada, in a "suit" on the merits according to the substantive law in such territory, or in a settlement we agree to.
7. "Electronic data" means information, facts or programs:
- a. Stored as or on;
  - b. Created or used on; or
  - c. Transmitted to or from
- computer software, including systems and applications software, hard or floppy disks, CD-ROMS, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.
8. "Employee" includes a "leased worker". "Employee" does not include a "temporary worker".
9. "Executive officer" means a person holding any of the officer positions created by your charter, constitution, by-laws or any other similar governing document.
10. "Hostile fire" means one which becomes uncontrollable or breaks out from where it was intended to be.
11. "Impaired property" means tangible property, other than "your product" or "your work", that cannot be used or is less useful because:
- a. It incorporates "your product" or "your work" that is known or thought to be defective, deficient, inadequate or dangerous; or
- b. You have failed to fulfill the terms of a contract or agreement;
- if such property can be restored to use by:
- a. The repair, replacement, adjustment or removal of "your product" or "your work"; or
  - b. Your fulfilling the terms of the contract or agreement.
12. "Insured contract" means:
- a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire, lightning or explosion to premises while rented to you or temporarily occupied by you with permission of the owner is subject to the Damage To Premises Rented To You limit described in Section D. – Liability and Medical Expenses Limits of Insurance.
  - b. A sidetrack agreement;
  - c. Any easement or license agreement, including an easement or license agreement in connection with construction or demolition operations on or within 50 feet of a railroad;
  - d. Any obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality;
  - e. An elevator maintenance agreement; or
  - f. That part of any other contract or agreement pertaining to your business (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume the tort liability of another party to pay for "bodily injury" or "property damage" to a third person or organization, provided the "bodily injury" or "property damage" is caused, in whole or in part, by you or by those acting on your behalf. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.
- Paragraph f. includes that part of any contract or agreement that indemnifies a railroad for "bodily injury" or "property damage" arising out of construction or demolition operations within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing.
- However, Paragraph f. does not include that part of any contract or agreement:

**BUSINESS LIABILITY COVERAGE FORM**

1.18

- (1) That indemnifies an architect, engineer or surveyor for injury or damage arising out of:
    - (a) Preparing, approving or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders, designs or drawings and specifications; or
    - (b) Giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage; or
  - (2) Under which the insured, if an architect, engineer or surveyor, assumes liability for an injury or damage arising out of the insured's rendering or failure to render professional services, including those listed in (1) above and supervisory, inspection, architectural or engineering activities.
13. "Leased worker" means a person leased to you by a labor leasing firm under an agreement between you and the labor leasing firm, to perform duties related to the conduct of your business. "Leased worker" does not include a "temporary worker".
14. "Loading or unloading" means the handling of property:
- a. After it is moved from the place where it is accepted for movement into or onto an aircraft, watercraft or "auto";
  - b. While it is in or on an aircraft, watercraft or "auto"; or
  - c. While it is being moved from an aircraft, watercraft or "auto" to the place where it is finally delivered;
- but "loading or unloading" does not include the movement of property by means of a mechanical device, other than a hand truck, that is not attached to the aircraft, watercraft or "auto".
15. "Mobile equipment" means any of the following types of land vehicles, including any attached machinery or equipment:
- a. Bulldozers, farm machinery, forklifts and other vehicles designed for use principally off public roads;
  - b. Vehicles maintained for use solely on or next to premises you own or rent;
  - c. Vehicles that travel on crawler treads;
  - d. Vehicles, whether self-propelled or not, on which are permanently mounted:
- (1) Power cranes, shovels, loaders, diggers or drills; or
  - (2) Road construction or resurfacing equipment such as graders, scrapers or rollers;
- e. Vehicles not described in a., b., c., or d. above that are not self-propelled and are maintained primarily to provide mobility to permanently attached equipment of the following types:
- (1) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment; or
  - (2) Cherry pickers and similar devices used to raise or lower workers;
- f. Vehicles not described in a., b., c., or d. above maintained primarily for purposes other than the transportation of persons or cargo.
- However, self-propelled vehicles with the following types of permanently attached equipment are not "mobile equipment" but will be considered "autos":
- (1) Equipment, of at least 1,000 pounds gross vehicle weight, designed primarily for:
    - (a) Snow removal;
    - (b) Road maintenance, but not construction or resurfacing; or
    - (c) Street cleaning;
  - (2) Cherry pickers and similar devices mounted on automobile or truck chassis and used to raise or lower workers; and
  - (3) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment.
16. "Occurrence" means an accident, including continuous or repeated exposure to substantially the same general harmful conditions.
17. "Personal and advertising injury" means injury, including consequential "bodily injury", arising out of one or more of the following offenses:
- a. False arrest, detention or imprisonment;
  - b. Malicious prosecution;

- c. The wrongful eviction from, wrongful entry into, or invasion of the right of private occupancy of a room, dwelling or premises that the person occupies, committed by or on behalf of its owner, landlord or lessor;
  - d. Oral, written or electronic publication of material that slanders or libels a person or organization or disparages a person's or organization's goods, products or services;
  - e. Oral, written or electronic publication of material that violates a person's right of privacy;
  - f. Copying, in your "advertisement", a person's or organization's "advertising idea" or style of "advertisement";
  - g. Infringement of copyright, slogan, or title of any literary or artistic work, in your "advertisement"; or
  - h. Discrimination or humiliation that results in injury to the feelings or reputation of a natural person.
18. "Pollutants" means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.
19. "Products-completed operations hazard";
- a. Includes all "bodily injury" and "property damage" occurring away from premises you own or rent and arising out of "your product" or "your work" except:
    - (1) Products that are still in your physical possession; or
    - (2) Work that has not yet been completed or abandoned. However, "your work" will be deemed to be completed at the earliest of the following times:
      - (a) When all of the work called for in your contract has been completed.
      - (b) When all of the work to be done at the job site has been completed if your contract calls for work at more than one job site.
      - (c) When that part of the work done at a job site has been put to its intended use by any person or organization other than another contractor or subcontractor working on the same project.

Work that may need service, maintenance, correction, repair or replacement, but which is otherwise complete, will be treated as completed.

The "bodily injury" or "property damage" must occur away from premises you own or rent, unless your business includes the selling, handling or distribution of "your product" for consumption on premises you own or rent.

- b. Does not include "bodily injury" or "property damage" arising out of:
    - (1) The transportation of property, unless the injury or damage arises out of a condition in or on a vehicle not owned or operated by you, and that condition was created by the "loading or unloading" of that vehicle by any insured; or
    - (2) The existence of tools, uninstalled equipment or abandoned or unused materials.
20. "Property damage" means:
- a. Physical injury to tangible property, including all resulting loss of use of that property. All such loss of use shall be deemed to occur at the time of the physical injury that caused it; or
  - b. Loss of use of tangible property that is not physically injured. All such loss of use shall be deemed to occur at the time of "occurrence" that caused it.
- As used in this definition, "electronic data" is not tangible property.
21. "Suit" means a civil proceeding in which damages because of "bodily injury", "property damage" or "personal and advertising injury" to which this insurance applies are alleged. "Suit" includes:
- a. An arbitration proceeding in which such damages are claimed and to which the insured must submit or does submit with our consent; or
  - b. Any other alternative dispute resolution proceeding in which such damages are claimed and to which the insured submits with our consent.
22. "Temporary worker" means a person who is furnished to you to substitute for a permanent "employee" on leave or to meet seasonal or short-term workload conditions.
23. "Volunteer worker" means a person who:
- a. Is not your "employee";

**BUSINESS LIABILITY COVERAGE FORM**

1.18

- b. Donates his or her work;
- c. Acts at the direction of and within the scope of duties determined by you; and
- d. Is not paid a fee, salary or other compensation by you or anyone else for their work performed for you.

**24. "Your product":**

**a. Means:**

- (1) Any goods or products, other than real property, manufactured, sold, handled, distributed or disposed of by:
  - (a) You;
  - (b) Others trading under your name; or
  - (c) A person or organization whose business or assets you have acquired; and
- (2) Containers (other than vehicles), materials, parts or equipment furnished in connection with such goods or products.

**b. Includes:**

- (1) Warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of "your product"; and

- (2) The providing of or failure to provide warnings or instructions.

- c. Does not include vending machines or other property rented to or located for the use of others but not sold.

**25. "Your work":**

**a. Means:**

- (1) Work or operations performed by you or on your behalf; and
- (2) Materials, parts or equipment furnished in connection with such work or operations.

**b. Includes:**

- (1) Warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of "your work"; and
- (2) The providing of or failure to provide warnings or instructions.

1.19

---

**From:** David Kaplan <davek@1energysystems.com>  
**Sent:** Thursday, September 08, 2011 10:35 AM  
**To:** Cornwell, Tania  
**Subject:** RE: Contract 64081 - Energy Storage System Field Test Project  
**Attachments:** PSC-64081\_page\_10.jpg; PSC-64081\_page\_2.jpg

Tania, attached is my signed signature page 10, and an amended page 2 (corrects oversight on 1% interest rate).

I'll connect you via email with Doug Akiyoshi, our insurance agent.

Let me know if you need anything else.

Thanks,  
Dave

----- Original Message -----

**Subject:** RE: Contract 64081 - Energy Storage System Field Test Project  
**From:** "Cornwell, Tania" <[TJCornwell@snopud.com](mailto:TJCornwell@snopud.com)>  
**Date:** Wed, September 07, 2011 9:22 am  
**To:** "David Kaplan" <[davek@1energysystems.com](mailto:davek@1energysystems.com)>

Yes that works.

---

**From:** David Kaplan [<mailto:davek@1energysystems.com>]  
**Sent:** Wednesday, September 07, 2011 9:01 AM  
**To:** Cornwell, Tania  
**Subject:** RE: Contract 64081 - Energy Storage System Field Test Project

OK, thanks.

Is an emailed image of signature page OK to countersign? (And follow up with original once I receive it.)

----- Original Message -----

**Subject:** RE: Contract 64081 - Energy Storage System Field Test Project  
**From:** "Cornwell, Tania" <[TJCornwell@snopud.com](mailto:TJCornwell@snopud.com)>  
**Date:** Wed, September 07, 2011 8:18 am  
**To:** "David Kaplan" <[davek@1energysystems.com](mailto:davek@1energysystems.com)>

David,

It is a separate document. Once I receive a countersigned copy of the contract and all required insurance documents, I will issue the Notice to Proceed.

---

**From:** David Kaplan [<mailto:davek@1energysystems.com>]  
**Sent:** Tuesday, September 06, 2011 10:49 PM  
**To:** Cornwell, Tania  
**Subject:** RE: Contract 64081 - Energy Storage System Field Test Project



1.19

Tania, thanks.

Will the signed contract constitute Notice to Proceed, or is that a separate document?

Dave

----- Original Message -----

Subject: Contract 64081 - Energy Storage System Field Test Project

From: "Cornwell, Tania" <[TJCornwell@snopud.com](mailto:TJCornwell@snopud.com)>

Date: Tue, September 06, 2011 4:20 pm

To: "David Kaplan" <[davek@1energysystems.com](mailto:davek@1energysystems.com)>

David,

The Board of Commissioners voted on the above-mentioned contract today and approved for your countersignature. I missed our mail pickup so the original contract will go out in tomorrow's mail. I thought I would send you an electronic copy in case you needed it to get things going on your end.

If you have any questions, please let me know.

Thank you.

Tania J. Cornwell  
Public Utility District No. 1  
of Snohomish County  
PO Box 1107, M/S O2  
Everett, WA 98206  
P: (425) 783-5667  
F: (425) 267-6523

1.20

---

**From:** Barnes, Janet  
**Sent:** Friday, September 09, 2011 11:19 AM  
**To:** Cornwell, Tania  
**Subject:** FW: 1Energy

Tania:

Please add this email into the comm. log for future reference as Attachment A to the contract appears to indicate differently. The additional insured endorsement to the General Liability insurance specifically EXCLUDES design, analysis and modeling work. Dave Kaplan's insurance agent had specifically discussed with Dave that he should purchase Professional Liability for this contract.

Attachment A reads:

- **Energy Storage System (ESS) field test** – CONSULTANT will lead DISTRICT's investigation and field testing of a substation-scale energy storage system, in conjunction with Alstom Grid, EPRI and other commercial partners TBD. CONSULTANT services will include project management, system design, software development and partner management.
- **Flexibility Analysis and Modeling (FAM)** – CONSULTANT will lead DISTRICT's analysis and modeling of power supply and demand, in conjunction with University of Washington and other partners TBD. CONSULTANT services will include project management, system design, analysis, modeling and partner management.

Based on the email below you are able to start this contract as requested. He has met the remaining insurance requirements.

Jan  
Janet E. Barnes  
Risk Manager | Public Utility District No.1 Of Snohomish County  
2320 California Street | Everett, WA 98201  
P: (425)783-8621 | F: (425)267-6468 | C: (425)210-7393  
jebarnes@snopud.com

---

**From:** Herrling, James  
**Sent:** Thursday, August 25, 2011 8:56 AM  
**To:** Cornwell, Tania  
**Cc:** Barnes, Janet; Collar, Craig  
**Subject:** RE: 1Energy

Tania, I talked to Craig Collar about the need for Professional Liability insurance for this contract. Craig said he has discussed this issue with Chris Heimgartner and they believe 1Energy System's role will be primarily managerial. The technical aspects and recommendations that come out of this project will be reviewed and managed by our in-house staff. Therefore we are willing to waive the need for professional liability insurance. Please feel free to contact either Craig or myself if you need any additional information. Thanks, Jim

Jim Herrling  
Snohomish County PUD

(425)783-8303  
[jlherrling@snopud.com](mailto:jlherrling@snopud.com)

1.20

---

**From:** Cornwell, Tania  
**Sent:** Wednesday, August 24, 2011 8:28 AM  
**To:** Herrling, James  
**Cc:** Barnes, Janet  
**Subject:** 1Energy

Hi Jim,

Were you able to talk to Anne regarding 1Energy and removing the Professional Liability requirement? Craig is targeting the September 6<sup>th</sup> commission meeting so my deadline is Friday.

Tania J. Cornwell  
Public Utility District No. 1  
of Snohomish County  
PO Box 1107, M/S O2  
Everett, WA 98206  
P: (425) 783-5667  
F: (425) 267-6523

1.20

---

**From:** Barnes, Janet  
**Sent:** Friday, September 09, 2011 11:27 AM  
**To:** Cornwell, Tania  
**Subject:** RE: 1Energy

I believe so.

**Janet E. Barnes**  
Risk Manager | Public Utility District No.1 Of Snohomish County  
2320 California Street | Everett, WA 98201  
P: (425)783-8621 | F: (425)267-6468 | C: (425)210-7393  
jebarnes@snopud.com

---

**From:** Cornwell, Tania  
**Sent:** Friday, September 09, 2011 11:22 AM  
**To:** Barnes, Janet  
**Subject:** RE: 1Energy

I guess this means I have everything we are requiring from David?

---

**From:** Barnes, Janet  
**Sent:** Friday, September 09, 2011 11:19 AM  
**To:** Cornwell, Tania  
**Subject:** FW: 1Energy

Tania:

Please add this email into the comm. log for future reference as Attachment A to the contract appears to indicate differently. The additional insured endorsement to the General Liability insurance specifically EXCLUDES design, analysis and modeling work. Dave Kaplan's insurance agent had specifically discussed with Dave that he should purchase Professional Liability for this contract.

Attachment A reads:

- **Energy Storage System (ESS) field test** – CONSULTANT will lead DISTRICT's investigation and field testing of a substation-scale energy storage system, in conjunction with Alstom Grid, EPRI and other commercial partners TBD. CONSULTANT services will include project management, system design, software development and partner management.
- **Flexibility Analysis and Modeling (FAM)** – CONSULTANT will lead DISTRICT's analysis and modeling of power supply and demand, in conjunction with University of Washington and other partners TBD. CONSULTANT services will include project management, system design, analysis, modeling and partner management.

Based on the email below you are able to start this contract as requested. He has met the remaining insurance requirements.

1.20

Jan  
Janet E. Barnes  
Risk Manager | Public Utility District No.1 Of Snohomish County  
2320 California Street | Everett, WA 98201  
P: (425)783-8621 | F: (425)267-6468 | C: (425)210-7393  
jebarnes@snopud.com

---

**From:** Herrling, James  
**Sent:** Thursday, August 25, 2011 8:56 AM  
**To:** Cornwell, Tania  
**Cc:** Barnes, Janet; Collar, Craig  
**Subject:** RE: 1Energy

Tania, I talked to Craig Collar about the need for Professional Liability insurance for this contract. Craig said he has discussed this issue with Chris Heimgartner and they believe 1Energy System's role will be primarily managerial. The technical aspects and recommendations that come out of this project will be reviewed and managed by our in-house staff. Therefore we are willing to waive the need for professional liability insurance. Please feel free to contact either Craig or myself if you need any additional information. Thanks, Jim

Jim Herrling  
Snohomish County PUD  
(425)783-8303  
[jlherrling@snopud.com](mailto:jlherrling@snopud.com)

---

**From:** Cornwell, Tania  
**Sent:** Wednesday, August 24, 2011 8:28 AM  
**To:** Herrling, James  
**Cc:** Barnes, Janet  
**Subject:** 1Energy

Hi Jim,

Were you able to talk to Anne regarding 1Energy and removing the Professional Liability requirement? Craig is targeting the September 6<sup>th</sup> commission meeting so my deadline is Friday.

Tania J. Cornwell  
Public Utility District No. 1  
of Snohomish County  
PO Box 1107, M/S O2  
Everett, WA 98206  
P: (425) 783-5667  
F: (425) 267-6523



1.21

---

**From:** Chaney, Holly  
**Sent:** Monday, November 25, 2013 4:21 PM  
**To:** Cornwell, Tania  
**Subject:** 64081 1Energy Systems

Hi Tania,

I am back from the Caribbean (it was *heavenly*)... and I think you are still here!?

I wanted to let you know that I have confirmed with Craig Collar, Jason Zyskowski and Tom Melling (w/1EnergySystems) that we are ok to cancel contract # 64081 with 1Energy Systems, as it was replaced with contract # 70241.

Please let me know if any further action is required at this end regarding the cancellation.

Thank you,  
Holly

**Holly R. Chaney** | Executive Assistant  
Power, Rates & Transmission Management  
Snohomish County PUD #1  
Ph 425.783.1711 | Fax: 425.267.6768  
[hrchaney@snopud.com](mailto:hrchaney@snopud.com)